

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 2005

WEDNESDAY, MARCH 31, 2004

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Pete V. Domenici (chairman) presiding.
Present: Senators Domenici, Craig, Reid, and Murray.

DEPARTMENT OF ENERGY

OFFICE OF ENVIRONMENTAL MANAGEMENT

STATEMENT OF JESSIE H. ROBERSON, ASSISTANT SECRETARY

OPENING STATEMENT OF SENATOR PETE V. DOMENICI

Senator DOMENICI. The meeting will come to order. I understand Senator Reid, Senator Craig will be along, but I want to explain to you what's going on here and I haven't decided yet what I'm going to do, but there's a briefing by Mr. Tenet, a closed briefing for Senators, and I haven't heard him yet and I may get started and just recess and you'll have to wait. Sorry for the audience. We'll wait and come back, but we'll get you finished before noon.

So good morning, and for all of you the hearing is going to come to order. The subcommittee is going to take testimony on the fiscal year 2005 budget request. We're going to take testimony from Jessie Roberson, Assistant Secretary, Office of Environmental Management; Beverly Cook, Assistant Secretary of the Office of Environmental Health and Safety; Dr. Margaret Chu, Director of Civilian Radioactive Waste Management. I appreciate your participation here today and I look forward to your testimony.

The President's request for the Office of Environmental Management provides \$7.4 billion. This is the largest request ever made for environmental cleanup. I applaud the efforts of the Assistant Secretary Roberson and the efforts to reform the DOE cleanup program. I intend to carefully evaluate all the cleanup responsibilities.

The administration has succeeded in reducing the total cost estimates for 35 years by focusing on risk-based cleanup as a strategy and seeking accelerated cleanup agreements with the States. The DOE now believes that cleanup of the remaining 39 sites will finish by 2035 and will cost \$142 billion down from \$192 billion which we were looking at in 2001. While the achievement that we're going

to work towards is remarkable, I'm concerned by the Department's overriding determination to close out cleanup by 2035.

This budget proposes shifting a number of cleanup responsibilities to other offices and creating an entirely new office to manage future cleanup of any ongoing DOE activities that are not currently managed by EM.

It seems absurd to think that waste generated after a certain date shouldn't be handled in the same aggressive manner that EM has applied to existing cleanup. The budget process, creation of an office of future liability—and I'm not at all convinced that creating a new office and bureaucracy makes sense—EM has worked very hard to minimize waste cost and it would be a shame to lose the experience and knowledge created.

I intend to evaluate all the cleanup responsibilities EM has proposed shifting to other programs in this budget, including the proposal to saddle NNSA with the added cleanup burden. Since we don't ask EM to test our nuclear stockpile, it seemed inconsistent to expect NNSA to perform environmental cleanup. Now maybe I got it wrong, but I don't think so.

The President's budget requests \$880 million for Yucca. The President proposes tapping the mandatory fees assessed to utility customers to pay for developing the waste repository. These fees amount to \$749 million this year. The budget proposes that an annual receipt be reclassified as discretionary funds and appropriated. I'm not optimistic that this reclassification can be accomplished.

I know that the Senate budget resolution does assume \$577 million as a minimum level of funding, the same level that was provided in 2004. I remain hopeful that more will be provided this year in order to keep Yucca on schedule to open by 2010. For the Office of Environmental Safety and Health, the President's budget provides \$139 million. This office has the important responsibility of ensuring that DOE facilities across the complex maintain the highest levels of worker safety and abide by proper environmental standards.

I was disappointed to read in the Washington Post of a draft DOE inspector general report that indicates that there has been significant underreporting of worker inquiries by the Department of Energy's Office of Environmental Safety and Health.

According to the IG, the audit disclosed instances of inaccurate and incomplete data entry and the Department's safety performance was overstated. The audit found that the Department's reporting of restricted work, but that the contractor had actually reported 1,113 days of restricted work, a figure more than twice that which DOE has figured. If true, these accusations indicate that this Office has not addressed worker safety consistent with the mission and the responsibility. We'll be asking about that. You may have a different version. We want to hear that.

The Office also funds the Energy Employees Occupational Illness Compensation Program which has failed to expedite worker compensation claims. Now, I understand that that statute is not very easy to interpret and not very easy to implement. Nonetheless, we don't have any other statute and that means we've got to do better.

In my opinion, the claims that we failed in that regard need to be thoroughly discussed. Those who are waiting around for coverage are making a lot out of the fact that they are waiting and waiting, and that's difficult and it's very hard for us, too. I'm sure it's very hard for Senator Craig to gather enormous amounts of data to validate the worker claims that exist and I understand the Department has prepared new legislation as well as \$33 million for reprogramming in 2004. That's going to be tough, but we ought to get started.

PREPARED STATEMENT

I will evaluate both requests to ensure that these proposals will help DOE improve its ability to process worker claims. Now, I was going to yield to Senator Reid who is tremendously interested in what's going on and I appreciate working with him. Senator Reid. [The statement follows:]

PREPARED STATEMENT OF SENATOR PETE V. DOMENICI

Good morning—this hearing will come to order.

Today, the subcommittee will take testimony on the fiscal year 2005 budget request from Jessie Roberson, Assistant Secretary, Office of Environmental Management; Beverly Cook, Assistant Secretary, Office of Environment, Safety and Health; and Dr. Margaret Chu, Director, Office of Civilian Radioactive Waste Management.

I appreciate your participation here today and I look forward to your testimony.

The President's request for the Office of Environmental Management provides \$7.4 billion. This is the largest request ever made for environmental cleanup. I must applaud the efforts of Assistant Secretary Roberson for her efforts and the efforts by the Department of Energy to reform the DoE cleanup program.

This administration has succeeded in reducing the total cost of EM cleanup by \$50 billion and shortening the estimated timetable by 35 years. By focusing on risk-based cleanup strategies and seeking accelerated cleanup agreements with States, DoE now believes that clean up of the remaining 39 sites will finish by 2035 and will cost \$142 billion. Down from \$192 billion estimated in 2001.

While this achievement is remarkable, I am concerned by the Department's over-riding determination to close-out cleanup by 2035. This budget proposes shifting a number of cleanup responsibilities to other Offices and creating an entirely new Office to manage the future cleanup of any on-going DOE activities that are not currently managed by EM. It seems absurd to think that waste generated after a certain date shouldn't be handled in the same aggressive manner EM has applied to existing cleanup.

This budget proposes the creation of the Office of Future Liability. I am not at all convinced that creating a new office and bureaucracy makes any sense. EM has worked very hard to minimize waste and cost and it would be a shame to lose the experience and knowledge created within EM.

I intend to carefully evaluate all the cleanup responsibilities EM has proposed shifting to other programs in this budget, including the proposal to saddle NNSA with the added burden of cleanup. Since we don't ask EM to test our nuclear stockpile, it seems inconsistent to expect NNSA to perform environmental cleanup.

The President's budget requests \$880 million for Yucca Mountain. The President proposes tapping the mandatory fees assessed to utility customers to pay for developing the waste repository. These fees amount to \$749 million this year. The budget proposes that the annual receipts be reclassified as discretionary funds and appropriated. I am not optimistic that this reclassification can be accomplished this year. However, the Senate Budget Resolution does assume \$577 million as a minimum level of funding—the same level that was provided in fiscal year 2004. I remain hopeful that more will be provided this year in order to keep the Yucca Mountain on schedule to open by 2010.

For the Office of Environment, Safety and Health, the President's budget provides \$139 million. This Office has the important responsibility of ensuring that DoE facilities across the complex maintain the highest levels of worker safety and abide by proper environmental standards.

I was disappointed to read in the Washington Post of a "draft" DoE Inspector General Report that indicates that there has been significant under-reporting of

worker injuries by the Department of Energy's Office of Environmental, Safety and Health.

According to the IG "the audit disclosed instances of inaccurate and incomplete accident and injury data" and the "Department's safety performance statistics were overstated." The audit found that the Department's reporting at the Waste Treatment facility at Hanford reported 552 days of restricted work, but that the contractor had actually reported 1,113 days of restricted work—a figure more than twice as high as the DOE figure. If true, these accusations indicate that this office has failed to address worker safety consistent with its mission and responsibility.

This Office also funds the Employee Compensation program has failed to expedite worker compensation claims. The existing program has been plagued by challenges in putting together enormous amounts of data to validate workers claims. I understand the Department has prepared new legislation as well as a \$33 million re-programming in fiscal year 2004 to increase the effectiveness of the program.

I will carefully evaluate both requests to ensure that these proposals will help DoE improve its ability to process worker claims.

Now, I will yield to Senator Reid for any opening statement he would like to make.

STATEMENT OF SENATOR HARRY REID

Senator REID. Thank you very much, Mr. Chairman. I apologize for being a little bit late, but you always start promptly for which I am grateful. I am pleased to welcome the panelists here today. I think, Mr. Chairman, it's a mere coincidence that three of the witnesses here that are appearing today—anyway, I think it's good that you are appearing here today.

We generally mix these panels from year to year and I'm not sure that I am personally aware of your office having testified before, but if you have, I missed that. I'm glad that you're all here. I think this has been arranged well. I want to make a point about how history tends to repeat itself at the Department generally with results that I have to say haven't been good for the employees and the contractors.

Dr. Chu, as you know, this subcommittee held a hearing in Las Vegas earlier this month to address the issue of Yucca Mountain mining workers being exposed to silica dust and other problems, other compounds I guess would be the right word, during the boring of the experimental tunnel.

The experimental tunnel is 5 miles long. The Department didn't provide respiration equipment for ventilation—I'm sorry. I thought I turned it on. I must have turned it off.

Only after workers began getting sick recently has the Department begun to try to identify and find these workers, many of whom have no idea that the Department in essence has sent many of them to an early death. The Department knew of the presence, I should say, of silica in the rock being bored. The link to silicosis has been known for thousands of years and in that area it's been known for more than 100 years.

To make matters worse, the Department waited 10 years before lifting a finger to determine the extent of damage done to workers' health, only after workers began getting sick. Dr. Chu, you were gracious to send your Yucca Mountain site manager and your safety advisor to the field hearing and we appreciate that very much. You have been candid in my estimation.

I was, though, concerned with both of them. I thought they would say that we as an organization didn't do the right thing, didn't do a good job. We are going to do everything in our power to find the

people who are sick and take care of them, but we didn't get that. We got a lengthy discussion of how the Department now has policies and procedures in place to make sure something like this will never happen again. It shouldn't have happened in the first place, and we really have to do everything we can to find out the condition of the people that have been exposed there.

The present-day environmental management and environment safety and health programs—perhaps you will see that I am not comforted when I am told that DOE has policies and procedures in place. They do not have procedures in place to protect workers nationwide.

Ms. Roberson, you have the largest budget and one of the most important jobs in the entire department. For all intents and purposes, you are in charge of cleaning up the environmental catastrophe of winning the Cold War. This is a huge, technically difficult and extremely expensive job. I don't envy you this task. I think by and large, you've done a good job with your program of accelerated cleanups. Shaving decades and billions of dollars from these cleanup programs is a noble and important goal. Everyone involved wants these tasks completed, but we want them done right and the only way they can be done right is by keeping the workers who are doing it healthy and safe.

I am concerned when I read about what seems to be a very high injury and exposure rate among workers at cleanup sites. This was reported in the press over the weekend. I get more than upset when I read that DOE's own inspector general is reporting that the Department maintains "inaccurate and incomplete accident and injury data" even when its contractors have completely accurate data.

When the Department's database indicates that 166 days were lost to injury at the Idaho National Engineering Laboratory and the contractor, Bechtel, reports 463 days lost during the same reporting period, something's really wrong and this is particularly in light of the fact that Bechtel has received incentives and as contractors, discourages them from reporting too many injuries.

There are only two possible conclusions to draw from such a disparity: first, incompetence. Based on the Yucca Mountain Program experience and other monitoring of site workers that I have seen and heard over the years, this is plausible, unacceptable but plausible.

Second, the Department has been deliberately downplaying the risks associated with doing this cleanup, either to meet schedule or contain costs. Incompetence of keeping health records, particularly an organization that has roots dating back over 50 years, upsets me. However, if the final IG's report contains even a whiff of a notion that DOE has been systematically underreporting injury and exposure in order to meet deadlines and to contain costs, there are going to be some serious consequences.

None of us here are willing to trade lives and long-term life of our citizens in order to meet these milestones. Ms. Roberson, Ms. Cook, I desperately want to believe that there is a simple and plausible explanation for what the IG has found, and if you have one, I hope you'll share it with us. My long association with the Department through administrations, both Republican and Democratic, is that worker safety has never been the priority that it should be.

Frankly, the Department's first crack at an explanation gives me no faith that you're going to be able to convince me that everything is as it should be.

Whenever a department spokesman's first line of defense is that it's just a draft report and B, anyone who thinks we have a problem is just being political, as Joe Davis said this weekend, the Press Secretary for Secretary Abraham, my confidence level sinks. This is typical. Any professional doing his or her job who has the audacity to agree with their point of view is by nature a partisan or political hack. In my view, this is a flimsy defense when compelling answers and solutions are called for.

Dr. Chu, as you might imagine, I have some things I want to discuss. This is something that you may want to respond to in writing, but let me just say that you recently announced that you retained the Virginia-based law firm of Hunton & Williams at the sum of \$45 million to defend your license application. That seems like a lot of money to me, in light that the firm and its employees have had no involvement to date in the drafting of the license application. Your staff should be competent enough to draft and assemble the application itself, and it would seem to me they're in a good position to answer the questions and defend its contents.

Given the incredibly technical nature of this application, how is it possible for a bunch of lawyers to add \$45 million of value to this process? But I am hopeful that Hunton & Williams will not have any of the obvious conflicts of interests that the previous law firm did, Winston & Strawn. I'd be keeping a close eye on the staffing and billing of this legal team.

In the trade press, I've noted that you've settled the lawsuit filed by the loser in the original firm bidding process for almost \$5 million. That's a lot of money for a law firm that didn't do one single minute of work for American taxpayers in this matter.

So I have a series of questions that I will submit with the chairman's permission. I would hope that you would answer them as quickly as you can. One more thing. You were unable to attend the field hearing in Las Vegas early this month and hear what some of those workers had to say. We have to really take a look at that, and I hope that you'll go back and look at how the workers have been treated and how sick they are until we get to the bottom of this.

As I indicated earlier, not only am I concerned about the silicosis, but we had expert testimony there that one of the formations that they went through is something called ironite which is worse than asbestos and causes mesothelioma. We had a doctor come and testify to that fact, so it's a serious situation.

PREPARED STATEMENT

I appreciate very much, Mr. Chairman, your patience in allowing me to make this statement. I am going to, as I indicated, with your permission, submit a number of questions and ask the witnesses to respond to those to the full committee at their earliest convenience.

[The statement follows:]

PREPARED STATEMENT OF SENATOR HARRY REID

Mr. Chairman, I appreciate you holding this hearing today to discuss the budget for the Environmental Management, the Yucca Mountain program, and the Office of Environment, Safety and Health.

Like you, I am pleased to welcome Ms. Jessie Roberson, the Assistant Secretary for the Office of Environmental Management; Dr. Margaret Chu, the Director of the Office of Civilian Radioactive Nuclear Waste; and Ms. Beverly Cook, the Director of the Office of Environment, Safety, and Health.

It is a mere coincidence that the three of you are appearing together here today. We generally mix these panels up a little bit from year to year. Additionally, I am not sure that we hear from your office each year, Ms. Cook.

However, I am glad that all three of you are here together, so I can make a point about how history tends to repeat itself at the Department of Energy, generally with bad results for the health of employees and contractors.

Dr. Chu, as you know, this subcommittee held a field hearing in Las Vegas earlier this month to address the issue of Yucca Mountain mining workers being exposed to silica dust during the boring of the Experimental Tunnel in the mid-1990's. The Experimental tunnel is 5 miles long. The Department did not require or provide adequate respiration equipment for ventilation during the drilling of the first 3 miles, a period of about 2 years.

As many as 1,500-2,000 Test Site Workers may now be facing silicosis, a deadly respiratory disease. The number may be higher or lower. The Department is not really sure yet and did not keep accurate records of who was on the work site at the time and have made no effort until recently to try to figure it out.

Only after workers began getting sick recently has the Department begun to try to identify and find these workers, many of whom have no idea that the Department's negligence has potentially sentenced them to an early death.

The Department knew of the presence of the silica in the rock being bored. The link to silicosis has been known for THOUSANDS of years, yet the Department knowingly allowed its employees and contractors to toil for 2 years in such an environment before fixing the problem.

Then, to make matters worse, they waited for 10 years before lifting a finger to determine the extent of the damage done to workers' health, and then only AFTER workers began getting sick.

Dr. Chu, you were nice enough to send your Yucca Mountain Site Manager and your Senior Safety Advisor to the field hearing. However, I got pretty upset with both of them because, frankly, I expected them to say clearly and without equivocation, "We, as an organization, screwed up, but we are going to do everything in our power to find these workers and TAKE CARE OF THEM."

Instead, I got a lengthy discussion of how the Department now has policies and procedures in place to make sure something like this will never happen again.

Wrong Answer. It never should have happened in the first place.

Unfortunately, it happens a lot at DOE.

Let's fast forward to the present day Environmental Management, and Environment, Safety and Health Programs and perhaps you will see why I am not comforted when I am told that the DOE has policies in place to protect workers nationwide.

Ms. Roberson, you have the largest budget and one of the most important jobs in the entire Department: For all intents and purposes you are charged with cleaning up the environmental catastrophe associated with winning the cold war.

This is a huge, technically difficult, and extremely expensive job. I do not envy you this task, Ms. Roberson. I think, by and large, you have done a good job with your program of accelerated clean-ups. Shaving decades and billions of dollars from these clean-up programs is a noble and important goal.

Everyone involved wants these tasks completed.

However, we want them done right. And the only way they can be done right is by keeping the workers healthy and safe.

I am certainly concerned when I read about what seems to be a very high injury and exposure rate among workers at clean-up sites as I read over the weekend. But I get downright angry when I read that the DOE's own Inspector General is reporting that the Department maintains "inaccurate and incomplete accident and injury data" even when its contractors have completely accurate data.

When the Department's database indicates that 166 days were lost due to injury at the Idaho National Engineering and Environmental Laboratory and the contractor, Bechtel, reports 463 days lost during the same reporting period, something is wrong, particularly in light of the fact that Bechtel has incentives in its contract to discourage them from reporting too many injuries.

In my view, there are only two possible conclusions to draw from such a disparity:

—First, utter incompetence on the part of the Department in maintaining records. Based on the Yucca Mountain Program experience and other monitoring of Test Site Workers that I have seen and heard about over the years, this is entirely plausible. Unacceptable, but plausible.

—Second, the Department has been deliberately downplaying the risks associated with doing this clean-up work, either to meet schedule or contain costs.

Incompetence at keeping health records, particularly in an organization that has its roots dating back over 50 years, makes me very angry.

However, if the final IG's report contains even a whiff of a notion that DOE has been systematically under-reporting injury and exposure rates in order to meet deadlines or contain costs, there is going to be hell to pay.

None of us up here are willing to trade lives and long-term health of our citizens in order to meet milestones.

Ms. Roberson and Ms. Cook, I desperately want to believe that there is a simple and plausible explanation for what the IG has found. If you have one, I hope you will share it with all of us.

However, my long association with the Department, through administrations both Republican and Democratic, is that worker safety has never been the priority it should be.

Frankly, the Department's first crack at an explanation gives me no great faith that you are going to be able to convince me that everything is as it should be: whenever a Departmental spokesman's first line of defense is that (A) It is just a draft report and (B) Anyone who thinks we have a problem is just being political, as Joe Davis, Secretary Abraham's press secretary did this weekend, my confidence level sinks quickly.

This is pretty typical for this administration, though. Any professional doing his or her job who has the audacity to disagree with their point of view is, by nature, a partisan political hack.

In my view, that is a pretty flimsy defense when compelling answers and solutions are called for.

Enough on all of that for the moment.

Dr. Chu, as you might imagine, I have a further thought or two for you: first, you recently announced that you had retained the Virginia-based law firm of Hunton and Williams, for the sum of \$45 million, to defend your license application for Yucca Mountain before the Nuclear Regulatory Commission.

That seems like a huge sum for me, particularly in light of the fact that the firm and its employees have had no involvement to date in the drafting of the licence application. If your staff is competent enough to draft and assemble the application itself, are they not in a better position to answer questions about it and defend the its contents? Given the incredibly technical nature of the application, how is it possible for a bunch of attorneys, even ones with some knowledge of the regulatory process, to add \$45 million in value to this process?

While I am hopeful that Hunton and Williams will not have any of the obvious conflicts of interests that your previous law firm did, I will be keeping a close eye on the staffing and billing of this legal team.

I further note that I saw in the trade press that you have settled the lawsuit filed by the loser in the original law firm bidding process for \$4.5 million. That is a lot of money for a law firm that did not one single minute of work for the American taxpayers on this matter.

I have a series of questions for all of you that I will either ask at the appropriate time or will submit for the record. I hope all of you will respond in a timely fashion.

Thank you for allowing me to take up a little more time than usual, Mr. Chairman. You were unable to attend the field hearing in Las Vegas earlier this month and hear what some of these former workers had to say. I am still stunned and angry at the way the Department treated its workers back then and apparently still are. The Department is charged with doing important things for this country, many of them dangerous, and, unfortunately, I am no longer convinced that worker safety is a high enough priority. Perhaps we should consider slowing clean-ups down for a short period to allow the Department to take a comprehensive, across-the-board look at its safety policies and procedures.

Thank you, Mr. Chairman.

Senator DOMENICI. I would like to hear from Senator Craig. Senator Craig, before you do that, I want to share with you, in the event you haven't seen this, an announcement today by a consortium of American companies to start a process of seeing how the

new licensing procedures will help them in the event they want to build a nuclear power plant.

Now, they haven't said they're going to build one, but they've said they're going to join together and apply in an effort to determine whether it is true that this new process expedites licensing or not. I'm very thrilled. That's not the end of the road, but I would assume with your advocacy for nuclear power, that you would probably think this is a very important event.

Senator REID. Who's going to do that, Mr. Chairman?

Senator CRAIG. The companies are Exxon Energy, Nuclear Southern Company, Constellation Energy Baltimore, EDF International, which is a subsidiary of a large French firm.

Senator DOMENICI. Senator, I want to make sure that you understand that there is no site. This is just to see if it works.

Senator CRAIG. There's nothing wrong with that.

Senator DOMENICI. And I think we just need that. Senator Craig.

STATEMENT OF SENATOR LARRY CRAIG

Senator CRAIG. Well, thank you very much, Mr. Chairman, and thank you for mentioning that. I think what is important here is to, as the companies are attempting to do, demonstrate the U.S. Nuclear Regulatory Commission's new what they call the COL or COL process, which is a combination I think of construction and operating license end process. I think that might work well. Thank you all for being here today. We have a variety of important questions to ask of you and to look at the budget for the coming year. Let me say, and Senator Reid, let me echo your concern about worker safety.

There is a field report in each one of the field offices, and in the conversion of that report to a headquarters report, nothing should fall through the cracks, and I think that is what is being suggested that something might. To say that there is not full reporting, to go to the field offices and look, I think we see a different story, and it's important that there be full transparency here as it relates to reports and realities in worker safety. All of us are extremely concerned about that as we should be, as I know certainly all of you are.

Mr. Chairman, I've got a variety of issues that I will discuss and questions today, but let me say at the outset that I'm going to be very direct for a few moments on items associated with environmental management and that budget request. I'm going to be, I hope, very clear as to where I stand and what I'm going to ask of you, Mr. Chairman, and of the Ranking Member to support as we craft this budget bill.

For the second budget request in a row, DOE is asking that a number of responsibilities be transferred out of EM and into other programs. I guess I have to ask this, then. Is there a larger design here and is Congress only seeing it in a piecemeal fashion by a year-to-year budget proposal. It almost appears that DOE is reducing the scope of the EM program so that it can be finished and victory declared by a date possible and then, oh by the way, we aren't done with high-level waste and we transfer the spent fuel storage to another program and we haven't addressed buried waste and we've created a new office of future liabilities.

In other words, Mr. Chairman and to all of you assembled, environmental management is focused on completion as DOE's budget states, but only completion of all the things that aren't transferable somewhere else. So do I sound concerned? You bet I'm concerned. I'm very concerned about the position and the reorganization that DOE is proposing.

Here is what I have to ask the chairman and the ranking member to consider. I believe we should put these piecemeal transfers on hold in the fiscal year 2005 budget. I asked DOE to come back to the authorizing committees and to this committee with a comprehensive plan for all of these changes along with a mapping from the old budget to the new proposal and to submit all that within the 2006 budget request.

DOE is also asking to fence off \$350 million related to cleanup of high-level waste in Idaho and Washington, South Carolina until Congress passes legislative language related to waste reclassification. Let me be clear. I do not support the language DOE submitted. It may be that given DOE's loss in the court in Idaho, we may need to clarify what we mean in terms of tank closure.

If DOE and the State of Idaho can come to an agreement on the shape of that, what shape that clarification should take in law, I will work with my colleagues here to support that effort and to support the Department's effort.

I will not allow DOE to hold this work hostage or to hold this budget hostage with these kinds of tactics. DOE's own budget makes reference to the sole-source aquifer in Idaho, that most of the waste sits over the top of, that provides Idaho's drinking and irrigation water. Now, I notice that DOE's fiscal year 2005 budget at Rocky Flats in Colorado is asking for the funding to remove every last bit of radioactive material or waste, low-level waste, from Rocky Flats for off-site disposal. I find it very difficult to reconcile that with DOE's continued innuendoes that the States like Idaho and Washington are insisting on "gold-plated cleanup" just because they want some say in how DOE defines how clean is clean.

DOE knows I have been open to proposals that are alternatives to current proposals if they make sense to all parties involved. At Rocky Flats, DOE spent over 5 years working with the State of Colorado and other stakeholders in developing how clean is clean. They call it their soil action levels. Well, they were taking 5 years to develop those standards, they kept clunking along on the clean-up.

So I find it completely unacceptable that DOE thinks it can, if you will, hold hostage \$350 million and refuse to continue high-level waste cleanup while demanding that DOE have it their way in Idaho and Washington and South Carolina, or to spend money to remove all the radioactive waste at Rocky Flat but tell Idaho that DOE doesn't have to address any of our buried waste, some of which is transuranic, that stuff that is customarily, as we know, going to the facility in Carlsbad.

We know on this committee that resources are limited and that we don't have an open access to the U.S. Treasury, but we're going to be looking for some equitable treatment when it comes to risk. We're also going to be asking for what I would suggest needs to be

a clearly transparent approach to what the end game is and what the procedures are, and I don't feel at this time, frankly, we understand it nor are we gaining that kind of transparency. I hope that's about as clear as it can be said.

But Mr. Chairman, this is one Senator that is not at all happy with the current proposal and the current budget.

Senator DOMENICI. Thank you very much, Senator Craig. Let me say you have had to sit there and accept as we do in the Congress, the feelings of Senators. You have your opportunities to answer all this, but I'm going to do the following.

Senator Murray is willing to stay. I don't know if you want to go to Tenet? You don't. Well, Senator, you preside, and then Senator Murray has a series of questions, so if you would let her go, and I will try to get back. When I come back, I do want to ask if you have had a chance to explain the allegations, especially in the safety and health area, but four or five areas, because I am interested and I don't necessarily share the same opinion of the Senators who have spoken, but that's too bad. They may have more votes than I have.

But the important thing is to try to figure out how we can do it, and to do that, we've got to know facts, so with this, I'm going to yield to Senator Murray, and then Senator Craig is going to take over. I'm going to walk quickly to hear Mr. Tenet. I will stay until noon. If we are not finished, we'll just have another hearing because there are three or four issues that have to be answered or we're going nowhere.

You haven't talked much, Dr. Chu, and we want to hear from you also. Before I leave, I want to say that it is rare indeed to look at this problem of Yucca and the disposal of waste. We've been sitting around looking at a graph. At one point, we had 300, 400 billion on these graphs, and it's amazing that all the men that tried didn't make any headway. So now we've decided the women will take the lead, and I'm very pleased with you, Dr. Roberson, and with you, Dr. Chu. You came from one of our laboratories. It is absolutely amazing what you have done, regardless of the criticism. Your activities have been very, very interesting and I will leave now and try very much to come back. Okay.

STATEMENT OF SENATOR PATTY MURRAY

Senator MURRAY. Thank you very much. I assume that's an endorsement for women to take over the Senate as well.

Senator CRAIG [presiding]. I am now clearly in the minority in this room. Please proceed.

Senator MURRAY. Well, I do want to make an opening statement. I want to thank Senator Domenici. And other challenges are completed or well underway. The funding the administration has been requesting and this subcommittee has been providing is making a real difference. Unfortunately, that is not the full story at hand for today. It seems time and again, the Department makes decisions that raise questions about its commitment to full cleanup, partnership with Federal and State regulators, communication with the community, and concern about safety.

We can all agree with the Department's goal of accelerated cleanup, but as I said 2 years ago, this cannot occur at the expense of

worker safety or the environment. The recent events raised this very fear. First, the Department is seeking unilateral authority to reclassify high-level waste at Hanford, Idaho and South Carolina. Those three States plus New Mexico, New York and Oregon are opposing this effort in court.

Secondly, workers are being exposed to potentially dangerous tank vapors at Hanford.

Third, there are accusations that medical care is being manipulated to reduce the number of days not worked due to work-related injuries. These and other injuries raise real questions about the Department's commitment to full and faithful cleanup and worker safety.

PREPARED STATEMENT

I believe the Department can achieve full cleanup and cost and time savings while keeping faith with regulators, communities and workers. In fact, I believe the cleanup program can be a nearly unquestionable success if it addresses all those issues. We will not solve this today, but the Department needs to take some considerable steps to rebuild good faith with these partners in cleanup. Thank you, Mr. Chairman. I do have questions and I will wait until after the witness' testimony. Thank you.

[The statement follows:]

PREPARED STATEMENT OF SENATOR PATTY MURRAY

Mr. Chairman, I would like to make a brief opening statement.

First, I'd like to express my appreciation to you and Senator Reid for both of your steadfast support of the Environmental Management Program. This program is obviously vitally important to my State and I'm very appreciative of your help.

I'd like to say that I'm pleased with most of the recent cleanup activities at Hanford. Significant actions on spent fuel, the plutonium finishing plant, and other challenges are completed or well underway. The funding the administration has been requesting and this subcommittee has been providing is making a real difference.

Unfortunately this is not the full story at Hanford.

It seems time and again the Department makes decisions that raise questions about its commitment to full cleanup, partnership with Federal and State regulators, communication with the community, and concern about safety.

We can all agree with the Department's goal of accelerated cleanup, but as I said 2 years ago, this cannot occur at the expense of worker safety or the environment. But recent events raise this very fear.

First, the Department is seeking unilateral authority to reclassify high-level waste at Hanford, Idaho, and South Carolina. Those three States, plus New Mexico, New York and Oregon are opposing this effort in court.

Second, workers are being exposed to potentially dangerous tank vapors at Hanford.

Third, there are accusations that medical care is being manipulated to reduce the number of days not worked due to work related injuries.

These and other issues raise real questions about the Department's commitment to full and faithful cleanup and worker safety.

I believe the Department can achieve full cleanup and cost and time savings, while keeping faith with regulators, communities and workers. In fact, I believe the cleanup program can be a nearly unquestionable success if it really addresses these issues.

We will not solve this today, but the Department needs to take some considerable steps to rebuild good-faith with these partners in cleanup. Thank you Mr. Chairman.

Senator CRAIG. Well, thank you very much, Senator. Now that we've had our say, it's more than appropriate for you all to have your say before we go to questions, and with that in mind, let me first turn to Jessie Roberson, Assistant Secretary for Environ-

mental Management. Jessie, again, as the chairman has said, welcome before the committee.

STATEMENT OF JESSIE H. ROBERSON

Ms. ROBERSON. Thank you, sir, and good morning, Senator Murray and Senator Craig and staff for the subcommittee. I'd like to begin by conveying the Department's appreciation to you for your investment in the accelerated cleanup program. Your support is allowing us to achieve the dramatic results we forecast before this subcommittee a short 2 years ago.

I'm here today to discuss President Bush's fiscal year 2005 budget request for the Environmental Management program and its goal of sustaining the momentum that our work force has labored so hard to achieve, a momentum that benefits the vibrancy of our communities, our environment and our economy. In the last 2 years, we've introduced dynamic reforms, delivered fundamental change and achieved significant improvements in health, safety and environmental protection.

With your support, these reforms have become ingrained in our operations and our business processes, and with your continued support and our continued keen focus on risk reduction and cleanup, the momentum can and will continue. I'd like to take a moment to underscore the impacts of refocusing the Environmental Management program.

We have improved safety performance. We are committed to instilling the appropriate philosophy in every worker's day-to-day decisions from start to finish of every project. To that end, we are demonstrating that we can accelerate work and improve safety performance at the same time. We are focused on continuous safety improvement. We have institutionalized the behaviors of a learning organization in our organization. We invest in system safety training and leadership training. We demand a healthy inquisitiveness. We stick to the basics, allowing a disciplined conduct of operations, and we are focusing our environmental and operational safety efforts on prevention first.

And I look forward to responding to the issues raised in the opening statements regarding challenges to our safety performance. We have not nor will we stop paying attention to safety. We will continue to "raise the bar" and hold ourselves accountable to the highest standards.

Second, we have demonstrated real cleanup results and risk reduction. Last year we set a new floor of performance not yet seen in the history of this program, and I say floor because we see this as a level of performance that we will continue to build upon. Over the last 2 years, for example, six of nine nuclear fuel basins completely deinventoried. None of those were in our plan before. Four thousand, one hundred of 5,900 containers of plutonium, approximately 80 percent, have been packaged, we're almost complete. Over 1,300 of 2,400 metric tons, more than half, of the spent nuclear fuel is repackaged. Our workforce has accelerated that work, too.

Our corporate performance measures, detailing our performance, which I have included in my written statement, further demonstrates our progress and in combination with our safety perform-

ance, we have accomplished consequential outcomes important to the public, the communities that host our sites, and for the generations that follow us.

Three years ago, the Environmental Management program was described as lacking a risk-based cleanup approach and the hazards at the DOE sites and the liability associated with them did not appear to dictate the need for urgency. Innovative actions in all elements of the cleanup program were needed to transform EM's processes and operations to reflect an accelerated risk-based cleanup paradigm.

We believe that by providing an atmosphere that encourages innovation, we can reduce risk to workers and the environment more effectively and save resources to be reinvested in furthering the cleanup priorities of each of the sites. Tying all these accomplishments together has been our driving force to improve performance in our acquisition strategy specifically.

Legal actions and court decisions may direct us to alter or modify our activities from the accelerated cleanup and closure path. We are committed to work diligently with all concerned parties to avoid interruptions in reducing risk where we can. This year has seen dramatic results demonstrating our steadfast belief that continuing on the accelerated path will resolve the problems that lie before us. We must not lose our momentum that has so earnestly been established by the work force.

As with all new enterprises, impediments will be many, but we are committed to employ our resources to continue to show meaningful results and we're taking a very critical view of those results. The job is not done until it's done. We can't be complacent. We must continue to do better. It's not done when we develop a plan. It's not done when we agree on a milestone. It's not done when we ask for funding. It's not done when we sign a contract. It's not done when we get money. It's not done until it's done and there is positive and measurable risk reduction for the investment made.

PREPARED STATEMENT

I ask for your support of our fiscal year 2005 budget request of \$7.43 billion to continue this momentum. We are safer today than we were last year, and we must stay the course so that we are safer next year than today. We have accelerated cleanup by at least 35 years, saving over \$50 billion. The potential is there to lose what we have gained should we fail to stay focused on our commitments. Thank you, sir.

[The statement follows:]

PREPARED STATEMENT OF JESSIE H. ROBERSON

Mr. Chairman and Members of the subcommittee, I am delighted to be here today to convey the Department's appreciation for your support of the Environmental Management (EM) program, without which the dramatic results in accelerating the cleanup of the legacy of the Cold War would not be possible. I welcome this opportunity to sit before you and report on our progress, the potential gains and risks that lie before us, and the importance of sustaining the momentum that our work-force has labored so hard to achieve—a momentum that benefits the vibrancy of our communities and the environment.

Two eventful years have passed since the release of the Top-to-Bottom Review of the EM program. In these last 2 years, we have taken decisive steps to transform a program focused on managing risk to a core mission-focused program that is accel-

erating risk reduction and cleanup. We have introduced dynamic reforms, delivering fundamental change and achieving significant improvements in health, safety, and environmental protection but more was needed to be done.

Last year when I spoke with you, I stated that I was not “satisfied” with our progress. We must continue to better our performance and to look beyond the status quo to achieve results that are truly groundbreaking for the benefit of the generations that follow us. I challenged our workforce, our partners, and myself and all those interested in joining us in our vision of accelerated cleanup to put their most innovative ideas and people forward. I am proud to announce that with our combined efforts, our objective of accelerating environmental cleanup and risk reduction by 35 years and reducing estimated program costs in excess of \$50 billion has become a reality. As cited in the recently released U.S. Department of Treasury 2003 Financial Report to the United States Government, “the recognized cost of cleaning up environmental damage and contamination across Government programs was estimated to be \$249.9 billion, a decrease of \$23.1 billion or 8.5 percent from September 30, 2002. The most significant component of this reduction relates to the Department of Energy (Energy). Energy has reduced its environmental liability by \$26.3 billion or 12.5 percent in fiscal year 2003; this is the second year in a row that Energy’s environmental liability decreased”. Along with the environmental liability reduction in fiscal year 2002 of \$28.7 billion, the Department has reduced its environmental liability by \$55 billion over the last 2 years. A reduction mostly due to employing a cleanup approach that focuses on accelerating risk reduction to public health. With your support and our continued keen focus on cleanup and closure, the momentum can continue.

For fiscal year 2005, the President’s Budget includes a record \$7.43 billion for the accelerated cleanup program, the peak year in our funding profile. As we identified last year, the administration believes that this investment is crucial to the success of accelerated risk reduction and cleanup completion. We anticipate funding will then decline significantly to about \$5 billion in 2008.

The EM portion of the fiscal year 2005 Congressional budget is structured analogous to last year. The budget structure focuses on completion, accountability, and visibility; institutionalizes our values; and integrates performance and budget. Requested funding can clearly be associated with direct cleanup activities versus other indirect EM activities.

Within the Defense Site Acceleration Completion Appropriation, the budget reserves \$350 million for a High-Level Waste Proposal. With the Idaho District Court decision on Waste Incidental to Reprocessing, the Department’s ability to proceed prudently with accelerated risk reduction for some activities is drawn into question. The decision makes it difficult, if not impossible, for us to undertake planned actions at Idaho, Hanford and Savannah River Site to aggressively reduce risks posed by wastes stored in tanks at those sites—actions we had committed to take, in agreement with our host States, before the court decision. The decision now means we are likely to leave tank wastes in place longer while we try to resolve issues created by the decision—a course that has significant societal and monetary costs. This \$350 million supports activities normally funded from the 2012 Accelerated Completions account and from the 2035 Accelerated Completions. These funds will be requested only if the legal uncertainties are satisfactorily resolved.

In alignment with ongoing Departmental missions, this budget reflects a transfer of multiple activities that are not core to the EM mission to other Departmental elements. These transfers provide the responsible and accountable mission programs with the resources and tools to achieve their objectives at the expected performance level. This accountability model is the key to moving each of the enterprises or missions of the Department forward in attaining the desired outcomes and results important to the administration and supporting our accelerated risk reduction and closure initiative. Transfers include:

- Transferring Federal staff at the Pacific Northwest National Laboratory to the Office of Science and Federal staff at Headquarters to the Office of the Chief Information Office.
- Transferring the EM portion of the Offsite Source Recovery Program to the National Nuclear Security Administration.
- Transferring spent fuel storage responsibilities at Idaho National Laboratory, the Foreign Research Reactor Spent Fuel Program, management of NRC-licensed spent fuel, and the National Nuclear Spent Fuel Program to the Office of Civilian Radioactive Waste Management.
- Transferring Formerly Utilized Sites Remedial Action Project records management, responsibility for cost liability and recovery reviews, and Environmental Justice and the Massie Chairs of Excellence Program to the Office of Legacy Management (LM).

We will also be transferring sites, as they are completed, either to the landlord or to LM. The latter will occur if the site has no further DOE mission. EM is working with LM to ensure smooth site closure and transition by:

- Ensuring that site baselines identify functions and elements beyond contract closure to meet all internal requirements;
- Conducting assessments of site readiness for transfer and closure in tandem with LM;
- Having joint teams at each site (Rocky Flats has 2 LM employees) and supported by HQ LM personnel who were once EM personnel and EM personnel at sites are transferring to LM positions;
- Holding quarterly meetings between EM and LM senior management to address key issues and make decisions;
- Developing a communication plan defining roles and responsibilities between EM and LM staff.

The administration considers this budget request a critical step on the accelerated risk reduction and cleanup path. Without these resources, we could face higher risk to the environment and the public and lose the momentum we have gained in changing the paradigm. With your support, we have the opportunity to succeed in producing historic results that will last for many years to come.

DEMONSTRATING RESULTS

With the October 2003 release of the Report to Congress on the Status of Implementation of the Top to Bottom Review, we have demonstrated that the direction we took 2 years ago is showing real results. I wish to take a moment and expound the impacts of the far-reaching accomplishments that are underpinning the developing momentum of the program.

Improved Safety Performance

We believe in order to accomplish our accelerated risk reduction and cleanup mission, we must continue to do work safely. We are committed to instilling this philosophy in every worker's day-to-day decisions from start to finish of every project. To that end, with top-quality safety standards, we are demonstrating that we can accelerate work and improve safety performance at the same time. For example in August 2001, EM's Total Reportable Cases (TRC) and Lost Workday Cases (LWC) were 1.9 and 0.8 respectively, per 100 workers (TRC and LWC are standard tools used to measure safety performance). In September 2003, we had reduced our TRC to 1.2 and LWC to 0.5. These rates are significantly better than private industry, which OSHA reported in 2002, had a TRC of 5.3 and LWC of 1.6. The construction industry alone had rates of 7.1 for TRC and 2.8 for LWC in 2002. We have not nor will we stop paying attention to safety. We will continue to "raise the bar" and hold ourselves accountable to the highest standards. Complacency is not acceptable in our advance to the safe conclusion of our cleanup objectives.

Cleanup Results and Risk Reduction

Prior to the Top to Bottom Review, EM had lost focus of the core mission, the mission that the program was established to solve—address the environmental legacy of the Nation's Cold War nuclear weapons research and production. With a program responsible for the management of millions of gallons of liquid radioactive waste and thousands of tons of spent nuclear fuel, the unhurried pace of cleanup and risk reduction was unacceptable. If immediate actions were not taken the risks associated with the EM program would continue to grow to unpardonable levels.

Last year set a new floor of performance not seen before in the history of the program. Our investment has born amazing results. For example: three spent nuclear fuel basins were de-inventoried at Idaho National Laboratory, along with two at the Savannah River Site and one at Hanford. And in regard to Hanford, we have removed 70 percent of the spent nuclear fuel from the K-Basins. These basins located less than a quarter of a mile from the Columbia River have the potential to leak and cause costly environmental harm both to the health of the river and the public—this is a significant gain in risk reduction. Another example is at Rocky Flats. This site, once responsible for nuclear triggers, has shipped all plutonium off site and closed the last remaining material access area. These visible, risk reducing results that have demonstrated our ability to accelerate schedule and reduce life cycle cost while showing to our public and surrounding communities the Department's commitment to improve worker safety, reduce health risks and eliminate environmental hazards.

So you may have a better comprehension of the magnitude of our cleanup results, I would like to insert for the record a copy of our recent corporate performance measures. EM's Performance Measures is a compilation of the program's 16 complex

wide performance measures. As you can see, we can deliver significant risk reduction and cleanup and, as I stated earlier, in combination with improved safety performance. Accelerating risk reduction and cleanup, in concert with exceptional safety performance, accomplishes consequential outcomes important to the public, our communities, and for the generations that follow us.

Innovations in Ideas, Processes, and Practices

Two years ago, the Top-to-Bottom Review described the EM program as lacking a project completion mindset, internal processes were inconsistent with a risk-based cleanup approach, and the hazards at the DOE sites and the liability associated with them did not appear to dictate the need for urgency in the cleanup decisions. The Top-to-Bottom Review team emphasized that the EM mission cannot be accomplished by continuing business as usual. Innovative actions in all elements of the EM program would need to be taken to transform DOE's processes and operations to reflect the new accelerated risk-based cleanup paradigm.

To foster innovation, we identified ideas and processes from successful projects that had delivered accelerated results and conveyed the information across the EM program. For example, at Rocky Flats, we drew from their experience in project planning and delivery along with technology advancements. Sharing the innovative practices allowed for similar outcomes at other sites. If I may take a moment to share a few ideas and practices:

(a) Establish a clear end-state vision and risk-based cleanup levels in conjunction with specific future land/site use and in consultation with regulators, stakeholders, and affected and interested governments.

(b) A "best-in-class" management team is recruited and sustained with the result of team focus and retention of key staff.

(c) Senior management emphasis is placed on key safety issues of keeping workers working, minimizing the risk of possible high-impact events, quick recovery after accidents, safety "pauses" as appropriate, and improved safety training.

(d) Projects are managed in an environment that provides significant incentives for real cost savings.

(e) New and innovative equipment and methods are being used for size reduction (e.g. plasma cutting torch, engineered enclosures, water-jet cutting of components), significantly improving safety and effectiveness.

(f) Improved decontamination techniques coupled with new radiation instrumentation.

We continue to encourage innovation in our processes and practices to further enhance safety performance, accelerate risk reduction, reduce health impacts, and save resources to be reinvested in furthering the priorities of each of the sites.

Acquisitions Driving Performance

Tying all these accomplishments together has been our continued drive to improve performance from our new acquisition strategy. These accomplishments serve as indicators of the level of performance we are expecting from our contractors now as well as into the future. When we reviewed our contracts over the past year—as you may remember I said we formed a Contract Management Advisory Board last year—we identified a short list of significant findings that did not prove advantageous to the overall success of the program. We concluded that DOE tends to manage the contractor not the contract, that project baselines needed improvement along with project management and the associated reporting, incentives for meaningful risk reduction were lacking, more emphasis was needed on cost-efficient performance, and there seemed to be insufficient competition and small business participation.

To address these weaknesses, we have instituted three business models that we believe will vastly improve our acquisition process and opportunities for success. Our reform strategy is to accelerate the reduction of risk from the legacy of the Cold War safely and efficiently and at a cost savings for the taxpayer. One model focuses on improving incumbent contractor's performance, while another aims to increase competition and small business participation. The third concentrates on the establishment of national Indefinite Delivery/Indefinite Quantity (IDIQ) contracts for remediation and decontamination and decommissioning. All three are on the fast track. In fact, in September, as a first step we announced the selection of five 8(a) businesses that will perform work at our small sites across the country. And in fiscal 2004, we have six new contracts—two at Paducah, two at Portsmouth, one at the Fast Flux Test Facility at Hanford, and one at the Idaho National Laboratory along with the IDIQ contracts that will be competed. We expect these new contracts will challenge the contractor community, a challenge that is healthy for all involved.

We Have Our Challenges Too

As we continue to challenge the status quo, we may be confronted with legal actions and court decisions that will direct us to alter or modify our activities from the accelerated cleanup and closure path. We will continue to work diligently with all concerned parties to avoid interruptions in reducing risk and advancing cleanup for the public.

We expect to be challenged on our delivery of Government Funded Services and Items, or GFSI. We are accountable on delivery of GFSI and we expect to be held to our commitments.

Also, we have challenged our managers at all levels to stay true to our commitment and employ our corporate performance measures as an accountability and success gauge assessing our progress as well as a tool that alerts us when management action or intervention is warranted.

THE FISCAL YEAR 2005 BUDGET REQUEST

The fiscal year 2004 budget was the first budget that fully reflected the initiatives undertaken by the administration to transform and revitalize the cleanup of the former weapons complex. The EM program has been refined and fortified with management reforms, which have led to accelerated risk reduction and a decrease in life-cycle costs surpassing previous expectations. The investment we have requested in our fiscal year 2005 budget will contribute to EM's continued success in achieving its mission of accelerated risk reduction and site closure.

The EM fiscal year 2005 budget request represents the peak year of our investment strategy to accelerate cleanup and reduce risk. This budget fully reflects each site's accelerated risk reduction and cleanup strategy. The fiscal year 2005 budget request is pivotal to keep the momentum going and to achieve even greater risk reduction and cost savings than ever before.

The 2005 budget request for EM activities totals \$7.43 billion to accelerate risk reduction and closure. The request includes five appropriations, three of which fund on-the-ground, core mission work, and two of which serve as support. The five appropriations and associated requested funding are:

- Defense Site Acceleration Completion (\$5.97 billion),
- Defense Environmental Services (\$982 million),
- Non-Defense Site Acceleration (\$152 million),
- Non-Defense Environmental Services (\$291 million), and
- Uranium Enrichment Decontamination and Decommissioning Fund (\$500 million).

Within the Defense Site Acceleration Completion Appropriation, \$350 million is tied to the Idaho District Court decision on Waste Incidental to Reprocessing. These funds will only be requested upon satisfactory resolution of the recent court decision that affected the Department's plans for some waste streams.

In building the request, the Department applied the following principles and priorities:

Protect workers, public, and the environment.—The budget request continues to place the highest priority on protecting workers, the public, and the environment. The implementation of EM's cleanup strategies allows for an overall improvement in safety and reduction in risk because cleanup will be completed sooner, reducing the extent to which workers, the public, and the environment have the potential to be exposed. Over the past 2 years, dramatic improvements in safety performance have been demonstrated.

Ensure the appropriate levels of safeguards and security.—Due to heightened security levels throughout the Nation, it is crucial that we maintain vigilance in our domestic security to protect our citizens. The EM program is responsible for many tons of surplus nuclear material. This budget request reflects our increased safeguards and security needs, including the new Design Basis Threat requirements. Overall, the budget has decreased from fiscal year 2004 because we have been able to consolidate materials into fewer, more secure locations, and we have reduced the footprint of secure areas. The sites with the largest remaining funding needs are the Savannah River Site and Hanford. Savannah River Site's funding supports the security of nuclear materials, maintenance of uniformed protective force personnel, information security and operations security for the protection of classified and sensitive information, cyber security for the protection of classified and unclassified computer security, and personnel security. Hanford's funding supports security for shipment of special nuclear materials and elimination of one Material Access Area within the Plutonium Finishing Plant, enhancement of cyber security, Hanford site security clearances and other security activities.

Accelerate risk reduction.—Accelerated risk reduction requires a pragmatic approach to cleanup. Risk reduction occurs in various stages, which involve the elimination, prevention, or mitigation of risk. Because safe disposal of many materials will take a number of years to complete, our major focus of risk reduction is stabilization of high-risk materials.

The following categories of materials are considered to pose the highest risk:

- High-curie, long-lived isotope liquid waste,
- Special nuclear materials,
- Liquid transuranic waste in tanks,
- Sodium bearing liquid waste in tanks,
- Deteriorating spent nuclear fuel in leaky or poor integrity basins,
- Remote-handled transuranic waste and high transuranic content waste,
- Transuranic waste stored on the surface, and
- Decommissioning of highly-contaminated facilities.

Although all of these items are to be considered when setting priorities, their relative ranking may vary from site to site. Risk reduction is a major consideration in the development of the site baselines. Examples of planned activities/milestones for fiscal year 2005 that correspond to site-specific risk categories are:

Hanford

Complete cleanout of K East and K West basins (fuel, sludge, debris, and water).—The K basins are located less than 1,000 feet from the Columbia River. This project involves packaging and removing degrading spent nuclear fuel and radioactive sludge, debris, and water from wet storage in the K Basins to safe, dry interim storage away from the Columbia River. The K Basin facilities are well past their design lives and are a major threat to the environment due to the potential for basin leakage to the surrounding soil and the Columbia River. Their cleanout will prevent potential leakage of 55 million curies of radioactivity to the soil and the River and will decrease the risks posed by the basins to human health and the environment.

Complete transfer of nuclear material to the Savannah River Site or DOE approved interim storage facility, and complete legacy holdup removal and packaging/disposition of material/waste.—The Plutonium Finishing Plant (PFP) consists of several buildings that were used for defense production of plutonium nitrates, oxides and metal from 1950 through 1989. Completion of the transfer of the stabilized materials and legacy holdup material from PFP allows the cleanout and demolition of these facilities to slab on grade. It results in a reduced National security threat by consolidating nuclear materials into fewer locations.

Ship all above-ground transuranic waste to the Waste Isolation Pilot Plant.—Hanford has several thousand containers of previously generated transuranic waste in above-ground storage buildings. Characterization and shipment of this waste to the Waste Isolation Pilot Project for final disposal will reduce the risks to facility workers as well as reduce the safeguard and security vulnerability associated with this waste. This action represents final disposal of this waste in an environmentally protective repository.

Complete installation of In Situ Redox Manipulation Barrier in the 100-D Area.—Chromium-contaminated groundwater is reaching the Columbia River in the 100-D Area. The contamination levels are above 20 times the aquatic life water standard, and the area is adjacent to potential salmon spawning locations. To address this, a series of wells will be drilled and a chemical that detoxifies chromium will be deposited into the matrix in which the groundwater travels to the river. As a result, the groundwater reaching the Columbia River will once again meet the aquatic water standards, thereby protecting human health and the salmon population in the River.

Initiate waste retrieval from eleven single-shelled tanks.—Radioactive liquid waste stored in older single-shelled tanks has the potential of leaking and contaminating soil and groundwater that flows to the Columbia River, presenting a risk to human health and the environment. Waste will be retrieved from the single-shelled tanks and moved to safer double-shelled tanks.

Idaho

Disposition 34 containers of special nuclear material containing uranium, completing 75 percent of shipments offsite; initiate transfer of spent nuclear fuel from CPP-666 wet storage to the Irradiated Fuel Storage Facility; and maintain a running average of 2,000 cubic meters per year of TRU waste shipped out of Idaho.—Idaho sits over a major sole source aquifer, the Snake River Plain Aquifer, which is used to supply water to the people of southeastern Idaho as well as irrigation water for the significant agricultural activities. These actions will reduce the potential risk to human health by preventing the migration of contamination into the aquifer.

uifer. It also will reduce the national security threat by consolidating materials into fewer locations.

Paducah

Disposition 875 cubic meters of low-level/mixed low-level legacy waste, allowing for a 37 percent completion of work.—The packaging and disposal of low-level waste stored outdoors will reduce the waste inventory and eliminate the potential release into the environment that could result from deterioration of the storage drums. Outside storage of this material in some cases leads to additional surface water and soil contamination. Removal of these materials further reduces the continued exposure to workers performing surveillance and maintenance.

Disposition 12,400 tons of scrap metal.—Scrap metal is a suspected source of continued surface water and possible soil contamination. This action contributes to the continued source term removal of contaminants leaching into the environment. Reduction in the massive quantities of scrap metal continues to improve the potential safety concern to our workers.

Continue decontamination and decommissioning of C-410 complex.—The C-410 Complex is a large chemical complex in a shutdown condition. Removal of contaminated materials and equipment reduces potential risk to onsite workers and represents a key step in stabilizing the facility such that contaminants are prevented from release to the environment.

Portsmouth

Disposition 9,089 cubic meters of legacy waste.—The continued shipment and disposal of legacy waste will proportionally reduce the risk such wastes present to the health and safety of workers and reduce the on-going potential for release to the environment.

Process approximately 42 million gallons of water through Groundwater Pump and Treat facilities.—Plume control keeps contaminants from reaching surface streams and off-site drinking water supplies. Trichloroethylene (TCE), which was an industrial solvent, is the main groundwater contaminant at the site.

Pantex Plant

Complete Zone 11 soil vapor extraction for removal of contamination from the vadose zone and protection of the groundwater.—Removing the soil gas contamination will avoid potential migration to a fresh water supply, thereby reducing the risk posed to human health and the environment.

Complete Burning Grounds landfills interim corrective measure (engineered covers) to secure wastes and protect groundwater.—The covers will mitigate the vertical transport of contaminants, which will reduce the potential impact to the fresh water supply.

Complete demolition of Zone 10 Ruins.—The Zone 10 ruins have suspected high explosives contaminants in the numerous disintegrating structures. Removal of high explosive will avoid further contamination of soils, and demolition of the ruins will reduce safety risks to persons in the area.

Complete decontamination and decommissioning of Building 12-24 Complex.—There is evidence that this complex contributed to the high explosives plume that migrated to the southeast and off-site. Decontamination of the 12-24 Complex will mitigate the migration of this plume.

Oak Ridge

Complete East Chestnut Ridge Waste Pile Closure.—Risks associated with industrial safety will be reduced by eliminating the need to excavate and transport the material to treatment subsequent to disposal.

Complete disposition of legacy low-level waste.—Approximately 40 percent of the low-level waste was stored outdoors in deteriorating containers. Disposition of this waste will decrease the risks associated with their potential environmental release.

Complete processing and stabilization of transuranic waste tanks.—This action will eliminate the potential for the waste's migration to groundwater.

Initiate contact-handled transuranic waste processing at the Waste Processing Facility.—This waste is stored in above grade-storage trenches and in earthen trenches. Processing the waste prevents the risk of release to the environment and a continued cost of waste storage and monitoring.

Complete treatment of liquid low-level waste supernate at the Waste Processing Facility and disposal of the dried supernate product at the Nevada Test Site.—Treatment and disposal of the supernate decreases the risks posed by these highly radioactive fission products.

Complete Atomic City Auto Parts.—This action will reduce the risks posed to workers and the surrounding community from uranium and polychlorinated biphenyls contamination in the soil.

Savannah River Site

Begin processing neptunium solutions.—SRS has approximately 6,000 liters of Neptunium-237 nitrate solution in H-Canyon. Through processing, the neptunium solutions are converted into a more stable form, and the risks they pose to human health and the environment are reduced.

Complete bulk waste removal in Tank 5.—Tank 5 is 1 of 49 underground tanks currently used to store radioactive liquid waste at the Savannah River Site. This waste represents one of the highest risk to human health and the environment. Current plans call for the removal of the waste from Tank 5 for treatment, stabilization and disposal. A new approach, the Waste-On-Wheels (WOW) system, will be utilized to remove the waste from Tank 5 and other tanks. The Waste-On-Wheels is a portable method of performing bulk sludge waste removal from the tanks. The WOW system will reduce the project schedule for waste removal and therefore reduce the risk to human health and the environment imposed by the highly radioactive waste.

Complete decommissioning of seven industrial and radioactive facilities.—Decommissioning excess radioactive facilities will reduce the footprint of the site, and therefore collectively reduces risk to the worker by eliminating the need to enter the facilities to perform required, routine surveillance and maintenance activities. Risk of worker exposures while performing these activities is eliminated. Decommissioning excess radioactive facilities also eliminates the potential environmental and human health risk of accidental releases from these facilities. Decommissioning industrial facilities eliminates the risk to workers associated with having to maintain old facilities which are no longer needed but which require regular inspections or maintenance activities, such as roof work.

Lawrence Livermore National Laboratory—Livermore Site

Construct, install, and operate a portable treatment unit at Treatment Facility D Hotspot, Treatment Facility E Hotspot, the northern portion of the East Traffic Circle Source Area, and the Treatment Facility 406 Hotspot area.—These actions will further prevent the release of trichloroethylene (TCE), thereby reducing risks to the public from exposure to contaminated groundwater.

Remove contaminated surface soil and contaminated sandpile at Building 850.—These actions will mitigate risk to onsite workers, and will prevent further impacts to groundwater above health-based standards.

Construct, install, and operate groundwater extraction and treatment facility.—Remediation of the high-explosive process area is a high priority due to the offsite migration of contaminant plumes, current impacts to onsite water-supply wells, and the inhalation risk to onsite workers. These actions will impede the migration of plumes, protecting offsite water-supply wells from contamination.

Maintain closure schedules.—Three major sites, Rocky Flats, Fernald, and Mound, have accelerated closure schedules. In addition, two smaller sites, Ashtabula and Battelle-Columbus are scheduled to close in 2006. Funding in the fiscal year 2005 budget will allow these sites to remain on track toward project completion and site closure.

At Rocky Flats, fiscal year 2005 funding provides for:

—*Completing site deinventory of legacy low-level/mixed low-level and transuranic waste to off-site disposal; completing remediation of 30 release sites.*—During fiscal year 2005, Rocky Flats will be approaching completion of their commitment to closure and conversion of the Rocky Flats site for future beneficial use. The buildings where plutonium and other hazardous materials were used in support of the nuclear weapons deterrent will be under various stages of demolition, the final quantities of radioactive wastes will be removed from the site, and the grounds will be receiving the necessary remediation action. These actions, when complete, will allow the Department of Energy to release the site to the U.S. Fish and Wildlife Service to become the Rocky Flats Wildlife Refuge with little or no further risk to human health or the environment.

At Fernald, fiscal year 2005 funding provides for:

—*Completing decontamination and dismantlement of the Waste Pits Complex and the East Warehouse Complex, and completion of waste pits remedial action operations.*—Completing the Waste Pit Remediation Project will result in over 1 million tons of waste pit material having been transported off-site via rail for safe, compliant disposal and the D&D of the treatment facility and other waste pit infrastructures. Completing these activities represents a substantial risk reduction to human health and the environment for the entire Fernald Closure

Project site. This remediation activity is being conducted in an extremely safe manner considering the industrial hazards involved.

- Completing Silos 1 and 2 operations, including removal of waste material, and beginning disposition of the waste for off-site disposal.*—Silos 1 and 2 Extraction and Treatment Operations represent the greatest risk to human health and the environment at the Fernald Closure Project. Silos 1 and 2 contain the highest levels of radiological activity residing in any waste stream at the site. The Silos 1 and 2 project constitute the Site Closure Critical Path. Their successful completion is a prerequisite for a timely and safe closure.
- Completing construction of the On-Site Disposal Facility Cell 3 and Cell 4 caps.*—Capping Cells of the On-Site Disposal Facility (OSDF) will insure the reduction in risk to human health and the environment during post closure. Overall, the OSDF will be composed of 8 cells, containing 2.5 million cubic yards of waste soil and debris. The OSDF has been designed and engineered to possess a 5-foot thick liner and a 9-foot thick cap. The OSDF has a design life of 1,000 years.

At Mound, fiscal year 2005 funding provides for:

- Completing remediation of 37 potential release sites (65 percent of remaining), including the restoration of potential release site (PRS) 66.*—Completing the PRS's in fiscal year 2005 decreases risk by preventing any further radioactive contamination from migrating into clean soil areas and ground water, by reducing potential exposure to site workers and other personnel located on site, and by precluding any potential environmental impacts to off site areas.

At Ashtabula, fiscal year 2005 funding provides for:

- Completing remediation of the Waste Management Unit.*—Remediating the Waste Management Unit significantly reduces the remaining risks of organic and inorganic chemical exposure to both soil and groundwater at the RMI site.

At Battelle-Columbus, fiscal year 2005 funding provides for:

- Completing decontamination/stabilization of the fuel storage pool and transfer canal and the high-bay area surfaces in JN-1.*—Removing this source term will reduce the risk of contamination, both internal and external, to the workers during building de-construction. Removal of the source term would also reduce risk to off-site areas and members of the general public.

Integrate technology development and deployment.—An integrated technology development and deployment program is an essential element for successful completion of the EM cleanup effort and for fulfilling post-closure requirements. The EM Technology Development and Deployment (TDD) program provides technical solutions and alternative technologies to assist with accelerated cleanup of the DOE complex.

EM technology development and deployment investments are focused on high-pay-off site closure and remediation problems through a two pronged approach: Closure Projects and Alternative Projects.

Closure Projects.—Principal near term closure sites (such as Rocky Flats, Fernald and Mound) will be provided with technical support and quick response, highly focused technology development and deployment projects. The goal is to ensure that accelerated site closure schedules are achieved.

- At Rocky Flats closure site, technical assistance teams will assess critical technical issues and provide technology alternatives including the treatment and disposition of orphaned waste streams and improved methods of beryllium decontamination.
- At Mound, innovative technologies will be developed to determine and enable treatment of radioactive contaminated soil beneath buildings.
- At Fernald, the vacuum thermal desorption demonstration will be completed to provide a technical solution for an orphaned waste stream, and technical support to the Silos No. 1, 2, and 3 waste removal and disposition will be successfully completed.
- At Oak Ridge, delineation of contamination and definition of treatment feasibility for subsurface contamination will be completed.

Alternative Projects.—Alternative approaches and step improvements to current high-risk/high cost baseline remediation projects are our second focus. The goal is to enable cleanup to be accomplished safely, at less cost, and on an accelerated schedule. EM is focusing funds for fiscal year 2005 on:

- Alternatives For Tank Waste Pretreatment and Immobilization (Hanford Site, Office of River Protection);
- Alternatives for Carbon Tetrachloride Source Term Location (Hanford Site, Richland);
- Alternatives for Disposition of High-Level Salt Waste (Savannah River Site);

- Alternatives for Remediation of Chlorinated Ethenes using Monitored Natural Attenuation (Savannah River Site);
- Alternatives for Deposit Characterization and Removal at Gaseous Diffusion Plants (Portsmouth);
- Alternatives for In situ Transuranic Waste Delineation and Removal (Hanford Site, Richland); and
- Alternatives for Non-Destructive Assay and Examination of Large Transuranic Waste Containers (Savannah River Site/Carlsbad).

CONCLUSION

This year has seen dramatic results demonstrating our steadfast belief that continuing on the accelerated path will provide the direction and framework to resolve the problems that lie before us. As with all new enterprises that seek to challenge the status quo, impediments will be encountered. We must not lose our momentum that has so earnestly been established through collaboration and a singular focus of delivering meaningful results for the American public.

We are committed to employ our resources to show meaningful results and we are taking a very staunch view of results. The job is not done until it is done. We cannot be complacent, we must continue to do better. It is not done when we develop a plan—it is not done when we agree to a milestone—it is not done when we ask for funding—it is not done when we sign a contract—it is not done when we get money. It is not done until it's done and there is positive and measurable risk reduction for the investment.

The only measure of success will be positive, measurable accomplishments of public safety and environmental protection. The longer we wait, the greater the potential risk. We must not lessen our commitment to the American people to do the "right thing". I ask for your support to continue this important work. We must avoid losing the opportunity to rid this legacy from our children's inheritance. We are safer today than we were last year and we must stay the course so we are safer next year than today. We have accelerated cleanup by at least 35 years reducing lifecycle cost over \$50 billion. The potential is there to lose what we have gained should we fail to stay true to our commitments.

I look forward to working with Congress and others to achieve this worthy goal. I will be happy to answer questions.

EM'S COMPLEX WIDE PERFORMANCE MEASURES ¹

Performance Measure	Unit	Fiscal Year 2003 Target	Fiscal Year 2003 Actual	Fiscal Year 2004 Target	Fiscal Year 2005 Target	Actual Lifecycle Through Fiscal Year 2003	Lifecycle Scope
Pu packaged for long-term disposition	No. Cont.	2,836	3,065	1,323	165	4,549	5,850
eu packaged for disposition	No. Cont.	277	201	925	669	2,054	9,101
Pu/U residues packaged for disposition	kg Bulk	934	1,140	254	76	107,659	107,782
DU&U packaged for disposition	MT	1,815	4,551	.....	.....	7,651	742,149
Liquid Waste eliminated	gallons (1000s)	700	.....	1,300	1,900	.....	88,000
Liquid Waste Tanks closed	No. Tanks	1	.....	9	9	2	241
HLW packaged for disposition	No. Cont.	130	115	250	250	1,727	18,735
SNF packaged for disposition	MTHM	857	807	633	1	1,446	2,420
TRU disposed	m3	4,522	6,372	12,952	13,678	14,092	141,314
LL/LMW disposed	m3	75,030	118,362	89,815	107,067	402,568	1,155,360
MAAs eliminated	No. MAAs .....	.....	1	1	1	6	14
Nuclear Facility Completions	No. Facs.	2	4	5	14	21	523
Radioactive Facility Completions	No. Facs.	7	24	45	67	148	804
Industrial Facility Completions	No. Facs.	49	107	110	187	617	2,423
Geographic Sites Eliminated	Sites	2	1	.....	2	76	114
Remediation Complete	No. Rel. Sites	214	260	200	283	5,186	10,374

¹ Each of EM's 16 corporate performance measures is quantitative and focuses on these materials, wastes, environmental media, and facilities that comprises the majority of the risk to environment, public health, and safety. When these measures are completed, the EM program has accomplished its mission. Each measure is tracked in the context of the total life-cycle on 2035 accelerated schedule. The corporate performance measures are under strict configuration control, thereby establishing performance expectations and accountability. Through strict configuration control, EM is able to make crucial corporate decisions that will keep the program on track, monitor and control costs, and manage site closure expectations.

Senator CRAIG. Secretary Roberson, thank you very much. Now let me turn to Beverly Cook, Assistant Secretary, Environmental Safety and Health. Bev, it's great to see you in this capacity. I saw you more often in Idaho. I think that I saw you here, but at any rate, welcome to the committee. Please proceed.

OFFICE OF ENVIRONMENT, SAFETY AND HEALTH

STATEMENT OF BEVERLY COOK, ASSISTANT SECRETARY

ACCOMPANIED BY BOB CAREY, SENIOR POLICY ADVISOR, OFFICE OF THE SECRETARY, DEPARTMENT OF ENERGY

Ms. COOK. Thank you, Senator Craig. It's good to see you again, too, and thank you, also, Senator Murray, for having me here. I appreciate this opportunity to discuss the fiscal year 2005 budget request for the Office of Environment, Safety and Health. It's sometimes not very clear exactly what the EH organization does, so I wanted to discuss it in a little bit of detail.

The mission of the Office of Environment Safety and Health is to ensure that the Department of Energy performs work in a safe, environmentally compliant manner. We fulfill that role by assuring that considerations of safety and health and the environment are integrated into all parts of the work that is done, in all the planning and all the execution of all the Department's work.

Our budget request in fiscal year 2005 is \$135 million. It's approximately level with that in fiscal year 2004 appropriations. In fiscal year 2005, we will partner with the line management, and we will establish programs that promote safe and environmentally compliant conduct, work and determine the effectiveness of those programs, and provide improvements and regulations where possible and where necessary to make sure that those improvements happen.

The EH budget programs are split between both Energy Supply and Other Defense Activities accounts, which is a little bit confusing at times within the energy and water development appropriations. However, the scope of the work in both of those accounts are applicable across the Department, across what we say and across everything that we do.

Our activities are split in areas of program and policies and standards and guidance and also corporate safety programs, health studies, and employee compensation. In addition, we have a program direction account in both of those accounts that cover our Federal staff, and that also sometimes gets to be a bit difficult. Under Energy Supply account activities, we issue policies, standards, and guidance to assure that the people, property and the environment are adequately protected.

For most DOE facilities, the DOE assumes the regulatory authority for safety and health as provided in the Atomic Energy Act. These requirements must take into account the unique nuclear, chemical and industrial hazards posed by the DOE operations, must be current with worldwide technologies, knowledge and experience, which is a large part of what we do, making sure that we stay current. We use the best available information.

In 2005, our nuclear safety policies and standards will be enhanced to reflect updated commercial codes and standards, the

changing DOE missions and work environments and emerging safety issues that are always encountered when we are working with hazardous materials in aging facilities. We will continue our interface with other agencies and organizations to ensure that these policies and standards are consistent with other Federal agencies and with the industrial regulations. We will use the results of the many health studies that have taken place over several decades to make sure that we have modified our policies as appropriate to protect our workers.

Our environmental protection policies will also be enhanced to reflect new and emerging environmental issues and regulations and allow for compliance with external environmental protection requirements in a cost-effective manner. We review and provide comments on regulations developed by other agencies to assure that DOE's unique operations are fully considered and comply with those regulations, and we also provide them the required documentation of the Department's compliance with environmental standards and progress toward meeting those environmental goals and radiation protection and pollution prevention goals.

In our DOE-wide environmental safety and health programs, we design programs to encourage and improve worker and nuclear facility safety and protect the public and environment, and that goes everywhere from things like the Department of Energy laboratory accreditation program which provides assurance that workers' records, exposure radiation records, are accurately measured and documented, and also things like the VPP program, the Voluntary Protection Program, which is highly recognized, DOE's work in that, to make sure that workers are involved in providing protection for themselves in their work place.

In fiscal year 2005, EH will develop the new DOE pollution prevention goals for the next 5 years, and we will make sure that we meet DOE's responsibilities under executive orders related to pollution prevention and implementing of environmental management systems within all of our work.

Environmental management systems are required of all Federal agencies and must be in place by 2005. Those require that you consider all environmental issues when you plan the work, so that you make sure they are effectively implemented. We will also provide cost-effective centralized environment, safety and health information to the DOE complex through online access to Environment Safety and Health industry standards, programs, policies and activities. We want to make sure that there is access to everyone to commercial standards and access to historical Environmental Safety and Health information to all people at all sites.

One of the things that we do now, one of the things that I looked at this morning, is a "rollup" or summary of all the occurrences that happen within the complex every 24 hours. The rollup is communicated electronically throughout the complex, and is available to everyone. The rollup is done weekly to inform the Headquarters senior managers and the senior managers throughout the complex about what's going on, what kind of trends, what people are running into, and to make sure that they learn from the lessons of others.

Under our Other Defense Activities account in the corporate safety programs, we spend much of our time looking at the synthesis of operational information, and through that, setting ESH expectations, through our contracts, through performance measures, and implementing of these “lessons learned” programs. Consolidating existing databases is a big part of what we’re doing right now and will continue to do through 2005. I will talk more later about the draft IG report.

The Computerized Accident/Incident Reporting System (CAIRS) was a way of summarizing the OSHA-type statistics although it is not our only way of collecting information. In the past, information was shared by circulating paper reports. We recognized that over a year ago that was not effective and that there was a great time delay between the occurrences and entering the paper information into the electronic system. We’ve made a concerted effort over the last year to make sure that we move to a fully electronic system with daily input and weekly checks to make sure that the information is accurate. We’re working with the IG so that they fully understand the changes that have happened to those systems and to make sure that we no longer have a time delay in sharing information.

We have consolidated the quality assurance responsibilities of the Department within the Office of Environment Safety and Health and are making sure that we strengthen our quality assurance methodologies. The RESL Program at Idaho, the Radiological Environmental Science Laboratories, is now under the purview of the Office of Environment Safety and Health.

In that laboratory we do analytical chemistry and radiation exposure assessments, environmental sampling and certification, and quality assurance. We also ensure that the data are accurate as well as technically and legally defensible. We continue to provide immediate environment safety and health support, everything from accident investigations to authorizations on a facility authorization basis. We investigate safety allegations, perform special reviews on nuclear hazards, fire protection, and a wide range of operations.

EH also carries out the statutory mandate for the Price-Anderson Amendments Act, where we enforce compliance of the Code of Federal Regulations’ nuclear safety requirements. In fiscal year 2005, we will begin enforcement of worker occupational safety and health requirements.

Our health responsibilities, which are under the Other Defense Activities account, cover a wide range of issues. They include occupational health, public health and epidemiological studies and international health studies; international studies make up the largest part of the EH budget. Under occupational health, we will provide the medical screening that we provide to our former workers at the Defense nuclear complex. We will also try to upgrade our occupational medical services by integrating it throughout the complex by including it in our contracts, to make sure that we’ve got consistent and reliable occupational medicine services across the complex.

We also will continue to support the Radiation Emergency Assistance Center training site at Oak Ridge, the REAC/TS, which provides rapid response for medical expertise and training to address

radiological accidents. Supporting REAC/TS is critically important, especially when we move into concerns about terrorist events.

Under public health, we will continue to fund the independent program of energy-related epidemiological studies that are done by HHS for us at DOE facilities. Many of those studies, however, are coming to an end. In fiscal year 2005 some of those studies will require fewer dollars as they come to the end. We document and publish the studies that have been done. This concerns not only the communities surrounding our sites but also our current and our former workers included in those studies.

Finally, EH supports several international health programs. Those include studies in Russia and in Japan of radiation-exposed populations. The Russian studies are very relevant and very interesting because they concern the kinds of exposures that we've seen in some of our more exposed populations within the DOE complex in the past. We also provide the support for medical surveillance and environmental monitoring in Spain and the Marshall Islands.

The Energy Employees Occupational Illness Compensation Program is funded within the EH budget, and as you have seen in our fiscal year 2005 budget submittal, there is a significant increase. This is because we have recognized that the number of applications greatly exceeded our original expectations, and the Department is actively and aggressively pursuing a 3-year program to completely eliminate the backlog of applications by the end of fiscal year 2006. It will require significant funding to do that. We have also implemented some reforms to effect those improvements to get to that point.

Finally, let me just say a few words about our program direction funding. As I said, it's in two different accounts. We perform critical functions with Federal staff to directly support the missions of the Department. It requires expertise in developing overall environmental safety and health policies for the DOE sites and the facility operations. We've taken many, many steps over the last year and a half to streamline our operations.

We've developed efficient processes such as reducing travel or other fixed costs through use of video conference capabilities to provide the training and information that's necessary in the complex in everything from consolidating office space to anything else we could think about. The number of Federal employees in EH has decreased by almost half over the last 5 years; that's a huge decrease.

Large funding reductions in fiscal year 2004 put at risk EH's ability to meet the demands of the DOE complex. We have to prioritize what we do and where we assist the program offices.

The requested funding level in fiscal year 2005 will restore the level of resources commensurate with the responsibilities of the office, and I think that is critical to do.

PREPARED STATEMENT

So thank you for this opportunity. I believe our administration's 2005 budget request for the Office of Environment Safety and Health reflects the level of funding that is needed to protect the workers and the public in our DOE sites in a cost-effective manner. I'd be happy to answer any questions that you have.

[The statement follows:]

PREPARED STATEMENT OF BEVERLY COOK

Mr. Chairman, Members of the subcommittee, I appreciate the opportunity to testify on the fiscal year 2005 President's Budget request for the Office of Environment, Safety and Health (EH).

The mission of the Office of Environment, Safety and Health is to ensure that the Department of Energy (DOE) performs work in a safe and environmentally compliant manner. EH fulfills that role by assuring that consideration for the safety and health of the DOE workforce and members of the public and protection of the environment are integrated into the planning and execution of all Departmental activities.

The Office of Environment, Safety and Health fiscal year 2005 budget request is \$135 million, approximately level with the fiscal year 2004 appropriation. This level of funding allows EH to leverage its resources and personnel to provide DOE's line management programs with essential environment, safety and health performance expectations; management tools to promote the safe conduct of work; environment, safety and health performance measures and analysis; and guidance for the protection of the environment in and around DOE sites. Integral to the Department's success is EH's skill in fostering increased awareness and providing support to line management throughout the Department using open and easily accessible communications tools. Our goal is to provide the safety infrastructure that allows for and promotes the safe and environmentally responsible conduct of work.

EH has traditionally filled the role of setting regulations and standards, and then providing independent oversight and enforcement to ensure the Department's compliance with those standards. The independent oversight functions were moved from EH in 2002, allowing EH to provide corporate environment, safety and health services. EH now serves as a partner with DOE Line Managers to establish programs that promote the safe and environmentally compliant conduct of work, to determine the effectiveness of those programs and to improve the programs and regulations when necessary.

In support of the President's Management Agenda, EH underwent a dramatic restructuring in 2003 to better perform its new role within the DOE. The restructuring allowed for cutting management layers, placing greater emphasis on corporate performance and quality assurance, and focusing more on e-government initiatives by consolidating databases and other electronic information management functions. The implementation of the new organization is continuing through 2004. The major challenge in 2005 will be succession planning. It is the responsibility of EH to assure appropriate technical expertise is available to support environment, safety and health concerns. As more of the DOE complex reaches retirement age, we are concerned that the necessary technical expertise may be lost, both in the headquarters and field operations, and in EH, where corporate expertise to support the program activities is required.

The scope of work performed by EH staff is multifaceted. I will now provide you with a description of the specific activities identified in the President's request for the Office of Environment, Safety and Health.

ENVIRONMENT, SAFETY AND HEALTH FISCAL YEAR 2005 BUDGET REQUEST

The Environment, Safety and Health programs are split between the Energy Supply and Other Defense Activities accounts within the Energy and Water Development appropriation. However, the scope of work often cuts across these funding lines because of the generic nature and cross cutting applicability of the work performed by EH. It is important that a framework is in place that is clear and easily understood by the DOE Federal and Contractor workforce, and the overall safety and environment goals of the Department are consistent throughout the DOE complex.

ENERGY SUPPLY

Fiscal Year 2004 Comparable Appropriation—\$22,564,000: Fiscal Year 2005 Request—\$30,474,000.

EH activities funded within the Energy Supply appropriation are concentrated into two programmatic areas: Policy, Standards and Guidance and DOE-Wide Environment, Safety and Health Programs. In general, work funded under this account is applicable to all of the DOE operations. In addition, a Program Direction decision unit includes funding for a portion of EH Federal staff and all of the EH Working Capital Fund.

Policy, Standards and Guidance

Fiscal Year 2004 Comparable Appropriation—\$1,799,000; Fiscal Year 2005 Request—\$4,205,000.

Policy, standards and guidance are issued to assure that people, property and the environment are adequately protected from the hazards of DOE activities. For most DOE facilities, DOE assumes direct regulatory authority for safety and health as provided by the Atomic Energy Act of 1954, as amended. Safety and quality assurance policy, standards and guidance must therefore take into account the unique nuclear, chemical and industrial hazards posed by DOE operations and must be current with worldwide technologies, knowledge and experience. EH must establish nuclear and facility safety requirements and expectations for working with workplace hazards and safety issues unique to our operations.

In fiscal year 2005, DOE nuclear and facility safety policies and standards will be enhanced to reflect updated commercial codes and standards, changing DOE missions and work environments, and emerging safety issues that are encountered continuously when working with hazardous materials and in aging facilities. We will continue our interface with the Occupational Safety and Health Administration, the U.S. Nuclear Regulatory Commission, the National Aeronautics and Space Administration, and Federal Departments of Transportation, Health and Human Services, Homeland Security, and the Defense Nuclear Facilities Safety Board to ensure DOE policies and standards are consistent with other Federal and industry regulations and are based on best available information. EH will also maintain close ties with national and international standards and regulatory bodies and various industry groups, such as the Institute of Nuclear Power Operations and the Energy Facilities Contractors Group. In fiscal year 2005, EH will continue to utilize the results of epidemiologic studies performed under other parts of the EH programs and modify worker safety and health policies as appropriate to improve protection of the workers. EH will also strengthen the Federal Employee Occupational Safety and Health program, which provides for protection of our Federal workforce.

Environmental protection policies will also be enhanced to reflect new and emerging environmental issues and regulations. EH will assist Programs to comply with external environmental protection requirements in a cost-effective manner and continue to develop timely guidance to assure understanding of newly promulgated environmental requirements. We will review and provide agency comments on regulations under development by other agencies, to assure that DOE's unique operations are fully considered. EH will also provide the required documentation of the Department's compliance with environmental standards and progress towards meeting performance goals for radiation protection and pollution prevention.

The increase in this account is due to moving the technical standards activities from DOE-Wide programs to Policy standards and guidance. This puts all of the policy and standards setting activities into one account. Increased membership fees for participation in the industry nuclear power group are also included.

DOE-Wide Environment, Safety and Health Programs

Fiscal Year 2004 Comparable Appropriation—\$5,068,000; Fiscal Year 2005 Request—\$5,795,000.

EH's DOE-Wide Environment, Safety, and Health (ES&H) Programs are designed to encourage and improve worker and nuclear facilities safety and protect the public and the environment. EH has developed state-of-the-art analysis tools and approaches, due to the unique nature and mix of radioactive, hazardous, and toxic materials at DOE facilities.

EH has responsibility for the Department of Energy Laboratory Accreditation Program (DOELAP). DOELAP is an accreditation (certification) program that provides assurance that worker radiation exposures are being accurately measured. DOE's nationally recognized Voluntary Protection Program (VPP), managed by EH, has resulted in enhanced worker safety protection. In fiscal year 2005, DOE will continue to re-certify DOE contractor VPP status and evaluate new applications for VPP status.

In fiscal year 2005, EH will develop new DOE pollution prevention goals for recycling and reduced toxic chemical use. Consistent with the new, Department-wide pollution prevention program plan to be developed during fiscal year 2004, EH will provide a roadmap for continuous improvement in DOE's pollution prevention efforts. We will also provide instruction and guidance to meet DOE's responsibilities under Executive Orders related to pollution prevention and implementation of environment management systems. EH will continue to guide all DOE programs in their planning and execution of complete National Environmental Policy Act (NEPA) analyses and conduct independent compliance assurance reviews for more than 15 major Environmental Impact Statements and related documents.

EH provides cost-effective management of centralized environmental, safety, and health information to the DOE complex. We will provide on-line access to environment, safety and health related industry standards, programs, policies and activities; access to a commercial standards subscription service; and access to historical environmental safety and health information for all DOE operations and sites.

The slight increase in this account is the net result of a large increase in the resources required to implement the new Worker Safety and Health rule, coupled with a decrease from moving the technical standards work to the Policy, Standards and Guidance account.

Program Direction

Fiscal Year 2004 Appropriation—\$15,697,000; Fiscal Year 2005 Request—\$20,474,000.

Program Direction in this account provides overall support for EH staff responsible for Energy Supply programs, includes salaries, performance awards and other benefits; all costs of transportation and expenses for Federal employees in accordance with Federal Travel Regulations; the EH Working Capital Fund for all EH staff, including those with salaries paid under Other Defense; and training for Federal staff. The Working Capital Fund provides for non-discretionary prorated costs for items such as space utilization, computer and telephone usage, mail service, and supplies. Also included is funding for competitive sourcing studies.

EH performs critical functions which directly support the mission of the Department. The EH mission requires experts to develop overall environment, safety, and health policy for DOE sites and facility operations and to provide a central and coordinated source of technical expertise to all field elements. EH provides a central clearing house for information, and analysis and feedback regarding new efforts, present activities, and unforeseen occurrences taking place at the multitude of diverse facilities within the DOE complex.

EH has taken many steps to streamline and develop more efficient internal processes in order to reduce costs. For example, EH has reduced travel and other fixed costs through the use of video conference capabilities and other innovative techniques. Furthermore, the number of Federal employees in EH has decreased by almost half in the last 10 years. However, the large funding reductions in fiscal year 2004 put at risk EH's ability to meet the demands of the DOE complex. Therefore, the increase in fiscal year 2005 will restore the level of resources commensurate with the roles and responsibilities of the office.

OTHER DEFENSE PROGRAMS

Fiscal Year 2004 Comparable Appropriation—\$119,366,000; Fiscal Year 2005 Request—\$104,519,000.

The EH Other Defense Activities are concentrated into three accounts: Corporate Safety Programs, Health Studies and Employee Compensation. These activities address the needs and issues related to a variety of Defense related program activities being conducted by the Department. In addition, a Program Direction decision unit includes funding for the salaries and benefits of a portion of the EH Federal staff and their travel and training.

The fiscal year 2005 budget request also includes funding for two Other Defense Activities programs that were transferred to EH from the Office of Environmental Management (EM) in fiscal year 2004. These are: (1) the Radiological and Environmental Sciences Laboratory (RESL) at Idaho, and (2) the Analytical Services Program. These programs help to ensure that analytical laboratory data and worker radiation exposure and environmental samples are of high quality and reliability. These programs support the quality of data used throughout the Department and are more closely aligned with EH's quality assurance function than EM's mission of accelerated risk reduction and site closure.

Corporate Safety and Health Program

Fiscal Year 2004 Comparable Appropriations—\$9,032,000; Fiscal Year 2005 Request—\$10,883,000.

The Corporate Safety Program serve a crosscutting safety function for the Department and its stakeholders in assessing, achieving and assuring excellence and continuous improvement in safety management and performance in the conduct of its missions and activities. Several tasks are included in Corporate Safety Program.

In fiscal year 2005, EH will provide analysis and certification of DOE's performance in protecting the public, workers, and the environment by synthesizing operational information. This supports decision-making and continuous ES&H improvement across the DOE complex. We will support the setting of ES&H performance expectations through contracts and performance measurements and implement a

lessons learned program. Our ES&H web sites and web-based database systems will be re-engineered in fiscal year 2005 to consolidate existing databases and utilize the most recent technology to distribute information in an efficient and effective manner. Because EH now has overall responsibility for DOE Quality Assurance, we will provide quality assurance information, corporate policy and guidance, and certification for activities such as Contractor Self-Assessment Programs. We will conduct performance evaluation and accreditation, technical support and measurements, and quality assurance methodologies through RESL. EH will also provide a process to ensure DOE environmental data is of high quality and reliability as well as technically and legally defensible. The increase in this account reflects the implementation of EH's new responsibilities related to Department-wide quality assurance.

To address immediate environment, safety and health issues, EH will perform accident investigations, facility authorization basis reviews, and safety allegation investigations. We will also conduct special safety reviews of nuclear hazards, criticality safety, seismic analysis, fire protection, emergency operations, facility design, and the startup and restart of facilities upon request of the Program offices. EH will continue to carry out the statutory mandate of the Price-Anderson Amendments Act of 1988 to enforce compliance with Code of Federal Regulations nuclear safety requirements at DOE sites and begin enforcement of the Worker Occupational Safety and Health Rule.

Health

Fiscal Year 2004 Comparable Budget—\$67,335,000; Fiscal Year 2005 Request—\$45,222,000.

The EH Health responsibilities are to establish and enhance the scientific bases for standards that provide levels of protection appropriate to the risk of the hazards present at DOE sites. This responsibility is included in four general areas: Occupational Health (corporate occupational medicine policy); Public Health (community bases health studies); Epidemiologic Studies (analysis and communication of worker injury and illness information); and International Health Studies.

There are several activities related to occupational health. Targeted medical screening will be provided to former workers of DOE's defense nuclear complex. Standards, policies, and corporate resources will be provided to efficiently deliver quality occupational medical services in an integrated manner to the current DOE workforce. In fiscal year 2005, EH will work to implement occupational medicine model contract language to ensure adequate and integrated occupation health programs at all DOE sites. EH will continue to support the Radiation Emergency Accident Center/Training Site (REAC/TS), which provides rapid response medical expertise and training to address radiological accidents.

Public health will be addressed through independent energy-related epidemiologic studies relevant to DOE workers and neighboring communities by the National Institute for Occupational Safety and Health, the National Center for Environmental Health, and the Agency for Toxic Substances and Disease Registry. These studies will inform the DOE and stakeholders of any adverse health impacts that DOE operations may have had on DOE workers and the public. In addition, DOE epidemiologic studies will be conducted that collect and analyze both medical and exposure data information for both current DOE workers and the public.

EH will support several international health program studies in order to upgrade and validate our knowledge of radiation health effects among workers and populations exposed to ionizing radiation or environmental contamination. DOE and the National Cancer Institute will jointly sponsor international studies to determine if there are any adverse health effects from exposure to radiological contamination from Chernobyl on the populations of Belarus, Ukraine, and Chernobyl cleanup workers, and epidemiologic studies of Russian workers at the Mayak Production Facility and other facilities in Russia. These studies will identify the level of radiation exposure where adverse health effects can be demonstrated for a large worker population exposed to low and moderate levels of radiation over a working lifetime and support the establishment of international and national radiation protection standards and policy. The DOE and Spain jointly sponsored Project Indalo will provide support for medical surveillance and environmental monitoring of the spread of plutonium contamination on a few hundred acres of land in southern Spain. In addition, EH will provide special medical care for a specific group of radiation-exposed individuals in the Marshall Islands and support the Radiation Effects Research Facility (RERF) in Japan, which conducts epidemiologic studies and medical surveillance for the Hiroshima and Nagasaki exposed population.

A decrease in this account reflects the absence of some programs that were congressionally directed in fiscal year 2004 and an assumption of reduced funding for certain international studies as they approach their conclusion.

ENERGY EMPLOYEES OCCUPATIONAL ILLNESS COMPENSATION PROGRAM

Fiscal Year 2004 Comparable Appropriation—\$25,646,000; Fiscal Year 2005 Request—\$43,000,000.

The Energy Employees Occupational Illness Compensation Program Act of 2000 (EEOICPA) authorized DOE to establish a process to assist employees of DOE contractors and their survivors with their applications for State workers compensation benefits. Around the time that EEOICPA was passed in 2000, and given the complexity of the process mandated in the authorizing legislation and the expected complexity of the physician panel reviews to be conducted, DOE had planned that it would take 10 years to completely review all applications. However, as the number of applications greatly exceeded original expectations, and the applicants' immediate need for this data to effectively pursue State workers compensation claims became clear, the Department has pursued a 3-year program to completely eliminate the backlog of applications by the end of fiscal year 2006.

The fiscal year 2005 budget includes \$43 million to maintain the accelerated schedule for EEOICPA activities. Together with additional funds reprogrammed from fiscal year 2003 and additional funds that have been requested to be reprogrammed in fiscal year 2004, this funding should enable DOE to significantly expedite the process through fiscal year 2004, complete the processing of all applications currently on file with DOE in fiscal year 2005, and completely process all of these applications through the Physicians Panels in fiscal year 2006. The Department has also implemented reforms that have already improved performance. In August 2003 the program processed 30 cases per week. But with process improvements and the final approval in fiscal year 2003 of \$9.7 million in transferred funds in September 2003, the rate has more than tripled to over 100 per week, and continues to rise. The Department also recently made changes to its regulations to expedite the processing of applications and currently is discussion with other Federal agencies and stakeholders possible legislative changes to address impediments to effective program implementation.

The significant increase in this account for fiscal year 2005 supports expedited processing of applications.

Program Direction

Fiscal Year 2004 Comparable Appropriation—\$17,853,000; Fiscal Year 2005 Request—\$20,414,000.

Program Direction in this account provides for the salaries and benefits of a portion of the EH Federal staff, their travel and training. The Working Capital Fund, the non-discretionary prorated costs for items such as space utilization, computer and telephone usage, mail service, and supplies for all EH staff, is budgeted under the Energy Supply account. In this account, Program Direction also includes funding to support the Federal RESL and the Analytical Services Program staff. As with the Energy Supply account, the large funding reductions in fiscal year 2004 put at risk EH's ability to meet the demands of the DOE complex. Therefore, the increase in fiscal year 2005 will restore resources commensurate with the roles and responsibilities of the office.

CONCLUSION

Mr. Chairman, we believe the administration's fiscal year 2005 budget request for the Office of Environment, Safety and Health reflects a level of funding to ensure protection of the workers and public near DOE sites and allows for the accomplishment of the critical work performed by DOE in a cost effective manner. It is critical that the Federal Government maintain the expertise to evaluate and direct operations to maintain a level of safety and environmental compliance the public and the Congress expects.

This completes my prepared statement, and I am happy to answer any questions the subcommittee may have.

Senator CRAIG. Secretary Cook, thank you very much for being before the committee this morning. Now let us turn to Dr. Margaret Chu, Director, Civilian Radioactive Waste Management. Doctor, welcome again before the committee.

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

STATEMENT OF MARGARET CHU, DIRECTOR

Dr. CHU. Thank you, Senator Craig and Senator Murray. I very much appreciate the opportunity to present our fiscal year 2005 budget request from the Office of Civilian Radioactive Waste Management. Our key objective is to begin receiving waste at Yucca Mountain in 2010. The schedule is tight and the consequences of delay are enormous. Fiscal year 2005 is a critical year in which important activities must be initiated and start to converge. Our total budget request is \$880 million. While this is an increase over historical funding levels, it is one that has been understood and carefully planned for many years.

We are positioned to commit funds responsibly and effectively. Out of the total budget request of \$880 million, the amount requested for the Repository Project is \$559 million. Our foremost funding priority is to meet our longstanding goal of submitting a high quality license application to the NRC in December of 2004. We are on track.

Quality and completeness are paramount. The application we submit will meet NRC's regulatory requirements and be docketable by the NRC. After the license application is delivered, we must be prepared to respond to queries and requests that NRC will make during the review. We expect that NRC's review would be very thorough and very rigorous, and our objective is to provide information in a timely and effective manner to support completion of NRC's review within the statutorily established time period.

There will also be continuing technical work, including ongoing testing programs as part of the performance confirmation. In parallel with the licensing process, we must focus on detailed repository design and ensure that the site is ready to support construction as soon as it is authorized by the NRC. We will be initiating activities related to long lead time procurements, prototyping and testing of engineered components and equipment, and we are also requesting funds to address safety-related needs at the site.

In the area of transportation, our request is \$186 million. One of the key activities will be the first phase of acquisition of long lead-time transportation casks and equipment which must begin now to provide the capability for waste acceptance in 2010. We are working with industry to procure an efficient cask fleet with the minimum number of separate designs. We will support expanded institutional interactions as we begin to establish preliminary routes, operating protocols and safeguard and security activities. We will continue to work on policy for emergency response training and technical assistance as required by the Nuclear Waste Policy Act.

State and tribal officials and other stakeholders will play an integral part in our transportation planning. In the area of Nevada transportation, we recently announced a preferred rail corridor and the proposed work in fiscal year 2005 includes completion of conceptual design and the beginning of preliminary design activities and issuance of the draft environmental impact statement for the rail alignment.

Some of this is contingent on the Department's issuing a record of decision selecting a mode of transportation and a rail corridor as appropriate. We expect to issue the decision very shortly.

Finally, many of us, including the Congress, have been aware for many years that funding requirements for Yucca Mountain would increase substantially as we approach construction and transportation system development. Historical appropriation levels will not be sufficient to meet these needs. Since 1995, the cumulative shortfall of funds between requested and appropriated amount exceeded \$700 million. A mechanism must be put in place now to allow the program to have ready access to the Nuclear Waste Fund without being constrained by funding pressures from other programs.

In accordance with the funding approach established in the Nuclear Waste Policy Act, the Department collects fees from nuclear utilities for the disposal of their spent nuclear fuel. In fiscal year 2005, an estimated \$749 million will be collected. The resources are there and we should not delay in making them available for their intended purpose.

Secretary Abraham has recently sent proposed legislation to the Congress that would reclassify the annual receipts that are deposited into the Nuclear Waste Fund as discretionary and credit them as offsetting collections. Under this proposal, the proposal will continue to be subject to an annual appropriation process and continue to be under Congress' oversight, however, without having to compete with other programs for funds.

If sufficient appropriations are not available, the Nation will not have an operating repository in 2010. Delays will mean an additional cost of nearly a billion dollars per year for waste sites to continue to provide temporary storage. The country would be forced to spend billions of dollars in this scenario without solving the problem.

PREPARED STATEMENT

In conclusion, we are ready to submit a high-quality license application to the NRC in December of 2004 and we are committed to begin operations at a licensed repository in 2010. We have reached a point where investment must be made in transportation, repository and waste acceptance readiness. I urge your support for our budget request to accomplish this vital national mission. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF MARGARET CHU

Mr. Chairman and members of the Committee, I am Margaret Chu, Director of the Department of Energy's (DOE) Office of Civilian Radioactive Waste Management (OCRWM). I appreciate the opportunity to present our fiscal year 2005 budget request and discuss our plans to license, build, and operate a geologic repository at Yucca Mountain in Nevada, and our efforts to develop the transportation system needed to deliver spent nuclear fuel and high-level radioactive waste to the repository.

OCRWM implements our Nation's radioactive waste management policy, as established by the Nuclear Waste Policy Act of 1982, as amended. This policy requires safe, permanent geologic disposal of spent nuclear fuel and high-level radioactive waste resulting from the Nation's atomic energy defense activities. The disposal of this material in a geologic repository is required to maintain our energy options and national security, to allow the cleanup of former weapons production sites, to continue operation of our nuclear-powered vessels, and to advance our international

nonproliferation goals. The Department's consolidation of spent nuclear fuel and high-level waste from 127 sites at a single secure, remote location is vital to our national interest. The Federal Government is contractually required to implement a permanent solution for management of commercial spent nuclear fuel, in return for which utilities and ratepayers have paid fees to cover the costs of disposal.

THE 2010 OBJECTIVE

The Program's key objective remains to begin receiving waste at the Nuclear Regulatory Commission (NRC) licensed Yucca Mountain repository in 2010. To achieve that objective, the Program must, in less than 7 years, seek and secure authorization to construct the repository from the NRC, begin constructing the repository, and receive a license amendment allowing receipt of waste and operation of the repository. We must also develop a transportation system to transport waste from civilian and defense storage sites to the repository. That is a tight schedule, and the consequences of delay are significant.

For every year of delay beyond 2010, the cost of storing and handling Departmental defense waste alone is estimated to increase by \$500 million. Regarding the nuclear utilities, the government's liability for damages for not beginning to take commercial spent fuel in 1998 already has been established by court decisions. While an accurate calculation of damages must await determinations by the courts, it is reasonable to assume that the amount of damages will be substantial and will increase with each year of delay.

Meeting the 2010 objective will require much greater resources than the Program has thus far received. We estimate, for example, that from 2005 to 2010 it will cost about \$8 billion—more than 80 percent of the budget required to meet the 2010 objective—to construct the repository and develop the transportation system. That would average more than \$1 billion a year, which is much higher than our previous annual appropriations.

THE FISCAL YEAR 2005 BUDGET REQUEST

Fiscal year 2005 is a critical year in which important activities must converge if we are to meet the 2010 objective. In fiscal year 2005, we will be fully engaged in the licensing process. At the same time, we must initiate certain activities in the near term to permit timely construction and ensure readiness for operations. These activities, in the areas of repository readiness and detailed design, transportation system development, and waste acceptance readiness—along with licensing activities—lead to our total budget request for fiscal year 2005 of \$880 million. While this is a significant increase over historical funding levels, it is an increase that has been carefully planned and understood for many years. We are confident that we are positioned to commit funds responsibly and effectively to defend the license application; to accelerate repository surface, subsurface, and waste package design work needed for construction authorization; and to conduct conceptual and preliminary design activities for Nevada transportation. Moreover, a major portion of the increase represents procurements, including transportation cask acquisition and important repository site safety infrastructure upgrades.

To set the stage for our fiscal year 2005 budget request, I would like to briefly describe OCRWM's fiscal year 2003 accomplishments, our ongoing activities based on our fiscal year 2004 appropriation, and our goals for fiscal year 2005.

FISCAL YEAR 2003 ACCOMPLISHMENTS

Having achieved Congressional and Presidential approval of the Yucca Mountain site in 2002, we successfully transitioned from a scientific study program to one focused on the regulatory requirements for obtaining a license from the NRC. We targeted five areas critical to licensing success in a broad Management Improvement Initiative: roles, responsibilities, authority and accountability; Quality Assurance; procedural compliance; the Corrective Action Program; and Safety Conscious Work Environment. We implemented a Program-wide functional realignment to create an organization focused on licensing, and we strengthened our Federal management team by bringing on board several senior managers with extensive experience in managing major Federal projects. These actions have positioned us to be a successful NRC licensee and to meet requirements for operating a repository safely, and will continue into fiscal year 2005.

Fiscal year 2003 brought significant challenges to our Program. The limited funding provided during the continuing resolution and the final fiscal year 2003 appropriation of \$457 million, which was \$134 million below our request, required us to institute contingency plans, reduce near-term work scope, and further delay transportation activities that are directly tied to our ability to meet the 2010 objective.

Rather than stretch our resources and risk the safety of our workers, we elected to partially close the Yucca Mountain site and to defer some work there. The focus of our efforts under these constraints was to maintain our goal of submitting a high-quality license application to the NRC in December 2004.

The Program prepared a conceptual design and a detailed plan for repository licensing, construction, and operation, and focused on completing the license application to the NRC for authority to construct the repository. By the end of fiscal year 2003, the Yucca Mountain Project had accomplished the following:

- Completed the conceptual design of the repository surface and underground facilities and waste package elements sufficient for development of the preliminary design for the license application.
- Completed materials testing and analyses required to support the license application design for the waste package and surface and subsurface facilities.
- Completed testing data input for the Total System Performance Assessment Post-closure Report, to be included in the license application.
- Initiated the development of the license application document.
- Identified Project records and technical documents that will be included in the licensing support network.

In addition, during fiscal year 2003, the OCRWM National Transportation Project drafted the “Strategic Plan for the Safe Transportation of Spent Nuclear Fuel and High-Level Radioactive Waste to Yucca Mountain”, which was issued in November 2003.

Throughout the Program, we implemented management improvements identified in the President’s Management Agenda. In fiscal year 2003, DOE was ranked number one among all Federal agencies in implementation of the President’s Management Agenda.

During fiscal year 2003, the Program launched its new and more rigorous Corrective Action Program (CAP) software system. The new CAP combined condition, non-conformance, and technical error reports, and the condition/issue identification and reporting/resolution system into a single entry point process.

FISCAL YEAR 2004 ONGOING ACTIVITIES

Yucca Mountain Project

Consistent with Departmental and Program objectives, the Yucca Mountain Project’s main focus in fiscal year 2004 is on completing the license application. The required elements of preliminary design, performance assessment, safety analyses, and technical data in the license application must be sufficient for the NRC to conduct an independent review and reach a decision to issue a construction authorization. The application must demonstrate that the repository can be constructed and operated with reasonable expectation that the health and safety of the public will be protected.

By the end of fiscal year 2004, with the funds appropriated, we will:

- Address all “key technical issue” agreements that the Department and NRC agree the Program needs to address prior to license application submittal.
- Complete required elements of the preliminary design for the waste package, surface facilities, and subsurface facilities in support of the license application.
- Complete the safety analyses for Department-owned spent nuclear fuel and high-level radioactive waste, and Naval spent fuel for the license application.
- Complete the total system performance assessment postclosure report in support of the license application. This report will reflect increased understanding of how emplaced nuclear waste will interact with the natural and engineered barriers after the repository is closed.
- Prepare tens of millions of pages of relevant documentation for inclusion in the electronic Licensing Support Network (LSN) and completed certification consistent with the requirements of 10 CFR Part 2, Subpart J.
- Complete a draft of the license application.

Even though site characterization is complete, in fiscal year 2004 we are continuing to collect valuable scientific information for the Performance Confirmation baseline. The NRC requires Performance Confirmation to continue until the repository is permanently closed.

National and Nevada Transportation Projects

As noted previously, we issued the “Strategic Plan for the Safe Transportation of Spent Nuclear Fuel and High-Level Radioactive Waste to Yucca Mountain” in November, which described the Department’s process for working cooperatively with States, tribes, and other interested parties as the transportation system is developed. In early fiscal year 2004, the transportation program focused on selecting the

transportation mode and corridor that would establish the transportation system's infrastructure requirements. In December 2003, we announced a preferred corridor for development of a branch rail line in Nevada to connect from an existing rail line to the Yucca Mountain site. The program is now defining infrastructure development projects to provide the capability for transporting spent nuclear fuel and high-level waste to the repository. Funding in fiscal year 2004 represents initial investments in major transportation infrastructure needs, including transportation casks, rolling stock, the transportation system in Nevada, a fleet maintenance facility, and the business systems needed to manage multiple procurements and construction projects.

Program Management and Integration

A key component of the Program Management and Integration budget element is Quality Assurance (QA). In the last year, we have made significant progress in the implementation of our QA program requirements. We have had several independent assessments that have determined that the QA program is being effectively implemented. We have also completed the actions and closed several of the significant QA issues that have been open for extended periods of time. Finally, we are preparing a major revision to our QA program document in support of the license application.

During this fiscal year, we have taken several steps to ensure we are prepared to manage major capital projects efficiently and cost-effectively. We submitted a detailed Capital Asset Management Plan for the Program to the Office of Management and Budget in November 2003, and are now working to complete a comprehensive program acquisition strategy that will be incorporated in the next update of the Plan next fall. We have strengthened our performance measurement and project management capabilities and systems, and are using them to monitor and manage all the activities that support license application completion.

FISCAL YEAR 2005 KEY ACTIVITIES

Yucca Mountain Project

The amount requested for the repository project in fiscal year 2005 is \$558.9 million, an increase of \$155 million over our fiscal year 2004 enacted level. The primary drivers for this increase are repository facility design, prototype development and testing, procurement in preparation for underground excavation, design of offsite utilities and infrastructure, and support for responding to technical questions on the license application.

Our initial focus will be on submitting the license application by December 2004. The license application, expected to be approximately 10,000 pages, will include a description of site characteristics; waste package, repository surface and subsurface designs; the basis for development of operations and maintenance plans for surface and subsurface facilities; safety analysis results for the period prior to permanent closure; total system performance assessment results for the post-closure period; and a discussion of how the proposed waste package and repository will comply with applicable regulatory requirements. It also will address safeguards, physical security plans, the quality assurance program, and performance confirmation. We are closely managing the schedule for the remaining work. Quality and completeness are paramount: the application we submit will meet the NRC's regulatory requirements and be docketable by the NRC.

After the license application is delivered, we must be prepared to respond to queries and requests that NRC will make during its technical review. We expect NRC's review to be thorough and rigorous, and our objective is to provide all required information in a timely and effective manner to support completion of the NRC's review within the statutorily established time period.

In parallel with the licensing process, we must focus on design of the repository and ensure that the site is ready to support construction as soon as it is authorized by the NRC.

By the end of fiscal year 2005, we will have:

- Completed and submitted a license application for repository construction authorization to the NRC.
- Updated the LSN certification concurrent with license application submittal.
- Completed the preliminary design for the waste package, surface facilities, and subsurface facilities, which requires continuing performance assessment analysis.
- Continued to refine the safety analysis as needed, in response to NRC review and in accordance with NRC licensing regulations.

- Completed the detailed work plan, cost estimate, and schedule, and established a performance measurement baseline for the final repository design and construction.
- Initiated procurement activities for construction of the surface and underground facilities.
- Developed designs for offsite facilities and utilities needed to support the start of construction.
- Addressed safety-related needs at the site.

We are requesting funding for payments-equal-to-taxes to the State of Nevada and to Nye County, Nevada; Yucca Mountain is located in Nye County. Our fiscal year 2005 request also includes funding for Affected Units of Local Government, as well as funding to the University System of Nevada and to Nye County and Inyo County, California for independent scientific studies.

National and Nevada Transportation Projects

The amount requested in fiscal year 2005 for National and Nevada Transportation activities increases from the fiscal year 2004 enacted level of \$63.5 million to \$186 million, \$163 million of which will be for the National Transportation Project. The significant increase in funding will support the initial procurement of transportation casks and auxiliary equipment and will accelerate operational capability.

The initial procurement of truck and rail casks is needed to provide the capability for waste acceptance in 2010, given the lead time required for solicitation, evaluation of proposals, NRC package certification (for new designs), and fabrication of transportation casks. We are working with the cask vendor industry to procure an efficient cask fleet that maximizes the government's ability to support the full range of contents that need to be shipped with the minimum number of separate designs. These procurements will proceed towards cask fabrication in a step-wise manner to maintain flexibility on final procurements as long as possible. We will also continue to address a new railcar standard implemented by the American Association of Railroads for shipments of spent nuclear fuel and high-level waste. In addition, we have requested funds for equipment procurement and infrastructure preparation needed for full-scale cask testing by the NRC to enhance public confidence in the NRC's cask certification process.

The National Transportation Project will support expanded institutional interactions with regard to establishing preliminary transportation routes, operating protocols, and safeguards and security activities. We will also continue support of State regional groups to facilitate development of the policy for funding State and tribal emergency response training and technical assistance as required by Section 180(c) of the NWPA. We will continue and expand our ongoing dialogue with State and tribal officials and other stakeholders who will play an integral role in our transportation planning.

We have requested \$23 million for Nevada transportation work, including completion of conceptual design and the beginning of preliminary design activities, issuance of the draft Environmental Impact Statement for the rail alignment, associated public hearings, and continued development of the land acquisition case file required by the Bureau of Land Management. Some of this is contingent upon the Department issuing a Record of Decision under the National Environmental Policy Act selecting a mode of transportation in Nevada and a rail alignment, as appropriate. We expect to issue the decision shortly.

Program Management and Integration

Our fiscal year 2005 request includes \$47.5 million for program management and integration activities, an increase of \$17.8 million over the fiscal year 2004 enacted level. The request reflects the need to have the strongest possible nuclear Quality Assurance program as we move into the licensing phase. Quality Assurance is the cornerstone of assuring the NRC that the Program has implemented activities related to radiological safety and health and waste isolation that are required by NRC regulations. We will complete the institutionalization of improvements that were introduced through the Management Improvement Initiative to meet the NRC's expectations of its licensees.

The fiscal year 2005 request also contains funding for system engineering and analysis activities to enable us to better evaluate and optimize the Program's component elements as they begin to converge into a single waste management system. In addition to the repository and transportation readiness, the third key piece that must be put in place is waste acceptance readiness—i.e., establishing the "pipeline" of wastes destined for Yucca Mountain. (In prior years, waste acceptance was part of the Transportation budget request, but is now included in Program Management and Integration.) By addressing waste acceptance issues now, we can ensure that

repository facilities and transportation infrastructure will be compatible with the commercial spent nuclear fuel and DOE-managed wastes that are planned for receipt in 2010 and beyond. OCRWM will work closely with the Office of Environmental Management on DOE spent nuclear fuel and high-level waste acceptance criteria to ensure that we have an integrated, timely, and cost-effective approach.

Program Direction

The Program Direction budget request of \$87.5 million supports Federal salaries, expenses associated with building maintenance and rent, training, and management and technical support services, which include independent Nuclear Waste Fund audit services and independent technical and cost analyses. These resources fund a small increase in support services related to Quality Assurance, and national transportation technical support activities. The request also reflects a small increase in Federal staff expenses to manage additional repository design/licensing activities and National and Nevada transportation work.

Assumption of DOE Spent Nuclear Fuel Management Functions

OCRWM will be the organization ultimately responsible for disposing of spent nuclear fuel owned by the Department. Therefore, our fiscal year 2005 budget reflects OCRWM's assumption of responsibilities for the National Spent Nuclear Fuel Program, management within the United States of returned foreign research reactor spent nuclear fuel, domestic research reactor spent fuel management, and the management of Chemical Processing Plant-666 from the Office of Environmental Management. To fund these programs, we expect the Office of Environmental Management to transfer \$22.3 million from its fiscal year 2005 appropriation, funded from the Other Defense Activities account. Similarly, the Department's plans call for the Office of Environmental Management to transfer to OCRWM \$5.2 million from the Energy Supply Research and Development account to support spent fuel management work at the Fort St. Vrain, Colorado, Independent Spent Fuel Storage Installation, and the Three Mile Island-2 Independent Spent Fuel Storage Installation at the Idaho Nuclear Technology Engineering Center, which will be transferred from the Office of Environmental Management, as well as domestic and university research reactor spent fuel management functions transferred from the Office of Nuclear Energy, Science and Technology.

An Office of DOE Spent Fuel Management, reporting to the OCRWM Director, will be established to integrate and manage DOE spent nuclear fuel activities without interfering with the ongoing mission we perform under the Nuclear Waste Policy Act. The transfer of these functions will enable OCRWM to consolidate DOE spent nuclear fuel expertise and oversight effectively and efficiently.

ENSURING ADEQUATE RESOURCES TO COMPLETE THE MISSION

The Department of Energy and the Congress have been aware for many years that funding requirements for the repository program would increase substantially as we approach construction and transportation system development. In fiscal year 2005 and beyond, the Program will need significantly increased funding to pay for the design, construction, and operation of the repository, and for acquisition and development of the transportation infrastructure. Much greater certainty of funding is needed for such a massive capital project to ensure proper and cost-effective planning and acquisition of capital assets. Delays simply increase costs, without fulfilling the Federal responsibility for safe, secure disposal of the waste.

In accordance with the funding approach established in the Nuclear Waste Policy Act, the Department collects annual fees from nuclear utilities for the disposal of their spent nuclear fuel. The fees are reflected in the utility bills that their customers receive. In fiscal year 2005, an estimated \$749 million will be collected. The resources will be there and we should not delay in making them available for their intended purpose.

The proposed appropriations language in the President's Budget is contingent upon enactment of legislation reclassifying the annual receipts that are deposited into the Nuclear Waste Fund as discretionary and crediting them as offsetting collections to annual appropriations. On February 27, 2004, Secretary Abraham sent proposed legislation to Congress that would accomplish this reclassification. By allowing the mandatory collections to be credited as discretionary, the net discretionary appropriation would be \$0. The proposed legislation would be effective until construction is complete for surface facilities for the fully operating repository. Under this proposal, the Program would continue to be subject to the annual appropriations process and Congressional oversight. This proposal would simply allow the Appropriations Committees to provide funding sufficient for the Program's needs without interfering with other DOE programs.

COST REDUCTION INITIATIVES

While access to the funds paid by ratepayers for nuclear waste disposal is nonetheless critical, we believe we can improve the funding outlook by reducing the total system life cycle cost of the repository system. With this goal in mind, we are looking at enhancements that can be achieved through phased development, technical alternatives, and acceleration of operations post-2010.

Under a phased development approach to repository construction, we have divided the surface and underground facilities into several phases so that the repository can be constructed and operated in stages. The license application will address all facilities necessary to emplace 70,000 metric tons of spent nuclear fuel and high-level radioactive waste, and will describe the incremental process for building those surface and underground facilities in modules and panels. In addition to controlling short-term cost spikes, this strategy will increase confidence in our ability to begin operations in 2010, allow experience from initial operations to guide later activities, and retain flexibility for future technology improvements to be incorporated.

Present-day technology and technical information are adequate to support a robust license application, the transportation of waste to the site, and repository operations. However, within the decades-long time span during which the Yucca Mountain repository would be operated, advances in technology can lead to life-cycle cost savings, schedule efficiencies, and improved understanding of the safety and security of the repository system. To date, we have identified potential cost savings opportunities totaling several billion dollars over the long lifetime of repository operations in areas such as welding, advanced materials, techniques for excavating the underground tunnels, and low-maintenance ground support. Activities to reduce life-cycle costs and allow for enhancements in the waste management system are integrated throughout the Program, and as such will be funded from all budget areas.

Finally, OCRWM is developing plans for accelerating operations after 2010 to achieve steady-state waste receipt rates without diminishing safety or quality. As we gain experience, faster handling and underground emplacement will become possible, and as additional phased construction modules are completed, operational capacity will increase. In addition to lowering costs, accelerated waste receipt would enhance security by isolating spent nuclear fuel and high-level waste faster, and could have the added effect of allowing waste storage sites to be decommissioned sooner than currently planned.

CONCLUDING REMARKS

We are committed to the goal of beginning to receive and transport spent nuclear fuel and high-level waste to an NRC-licensed repository in 2010. Toward that end, we intend to submit a high-quality license application to the NRC in December of this year.

We are requesting a major increase in funding in fiscal year 2005, but a necessary one both to achieve the Program's goals and to begin to meet the Federal Government's responsibility for safe, secure disposal of spent nuclear fuel and high-level radioactive waste. After more than 20 years of scientific study; a site approval process involving the Department, the State of Nevada, Congress, and the President; and purposeful efforts toward securing a license, we have reached the point where investments must be made in transportation, repository, and waste acceptance readiness, if we are to maintain the objective of commencing operations in 2010. We urge your support for our budget request, and we are pleased to be able to work with you on this important national issue.

Senator CRAIG. Thank you very much, Dr. Chu, for that provocative testimony. Let me start the questioning process. I'll do five and turn to Senator Murray and we'll go back and forth in that time frame and the chairman will be back in a few moments, I trust, to join in with us so we all have a variety of questions to be asked of the three of you.

RISK-BASED END STATES INITIATIVE

Let me turn to you, Jessie, and talk about the document published by your program for each large cleanup site called the Risk-Based End States, which is referred to as a vision document, I believe. The question from that would be what is the purpose of this document at a site which is a Superfund site and is controlled by

CERCLA, the Superfund law and has NEPA records of decision of most cleanup actions?

Ms. ROBERSON. Senator Craig, the Risk-Based End State initiative really is an effort to do exactly what you stated in your opening comments. It is an integration of some of the elements which are independent documents today—land use plans, our cleanup agreement, other documents that define our activities. It is an initiative to integrate those.

It is exactly one of the steps that we went through that allowed us to make informed decisions about soil cleanup levels at Rocky Flats. We will have to go through the same process at the other sites. This is a process that mimics the same process we used there that allowed a clear understanding of the basis for decision-making regardless to what the actual regulatory process was. It does not change the regulatory processes, but it does provide information for those decisions and it also makes transparent the basis for those decisions.

Many regulatory decisions are made relative to specific geographic areas without taking into consideration the context of our cleanup. We think it's a critical step. It does indeed mimic the same process that got us to cleanup levels at Rocky Flats, and we expect that it will be useful as a tool in our cleanup at Idaho.

Senator CRAIG. Okay. I've seen a draft of Idaho's End State document dated January 2004, but it has draft written on every page. What is the path forward for this document?

Ms. ROBERSON. Well, they will remain drafts for quite a while until we believe that we have adequately and openly addressed any issues or concerns with the public and with the regulators, so they may well be drafts for 6 months. We actually met with our field managers on Monday and Tuesday and went through site by site, and I think we still have not done an adequate job in that arena and we will be taking more time to do that.

At some point, we would expect to conclude that discussion and then we will look at those documents. This doesn't overtake the regulatory process. What it does is provides a visible basis for us and for the public to understand why we may propose what we propose in the regulatory process.

BNFL CONTRACT COSTS OVERRUNS

Senator CRAIG. Okay. Another question of you, earlier this week, trade publications reported that DOE has agreed to pay British-owned BNFL for cost overruns related to cleanups in Tennessee and Idaho. What can you tell us about the status of these negotiations between the U.S. and British officials and if there is any truth to the fact that DOE would provide \$500 million to compensate BNFL for what appears to be a bad investment?

Ms. ROBERSON. What I can say with total confidence is that the Department has a contract with BNFL and we are living up to that contract and we expect them to live up to that contract as well. We continue to look at all of our work at Idaho and any of our other sites specifically when we're in a procurement mode. We are looking at that work and how it fits into the overall procurement. I read the same article. I was intrigued, but I can't offer you more than that.

LABORATORY DIRECT RESEARCH FUNDING AT IDAHO

Senator CRAIG. Okay. I'm intrigued, too. My last question of you and then I'll turn to Senator Murray. Jessie, you know that I'm very concerned about the potential loss of LDRD funding, and of course we all know that's Laboratory Direct Research at the new Idaho national lab, and I've told the Secretary very directly that I believe LDRD is vital to that lab and its future missions. Isn't EM funding tapped for LDRD at both Oak Ridge and Savannah River?

LDRD FUNDING AT OAK RIDGE AND SAVANNAH RIVER

Ms. ROBERSON. I will tell you honestly, Senator, I do not believe so, but I would like to validate that for the record if I might. As a result of your raising this concern, we are certainly looking very closely at the issue. To my understanding, EM is not contributing, but I would like to validate that.

[The information follows:]

LDRD FUNDING AT OAK RIDGE AND SAVANNAH RIVER

At the Oak Ridge National Laboratory (ORNL), EM funds the laboratory for work in Technology Deployment and infrastructure activities like bioassays and utilities. Of the overhead rate paid by EM, ORNL uses a portion of the funding to support its LDRD activities. EM does not directly fund any LDRD activities at ORNL. Since the Savannah River Site has not established an LDRD program, no EM funds are used for LDRD at that facility.

Senator CRAIG. Please do. Thank you. Let me turn to Senator Murray.

HANFORD 300-AREA CLOSURE

Senator MURRAY. Thank you, Mr. Chairman. Ms. Roberson, the Pacific Northwest lab is a very valuable asset to the Federal Government, the State of Washington and to the tri-cities and in particular, as Hanford cleanup moves forward. As you know, there is a lot of concern over the schedule for cleaning up the 300-Area and replacing the laboratory's ongoing research capabilities that exist in that area.

I addressed those concerns when Dr. Orbach from the Office of Science testified on March 3, again in writing when Ambassador Brooks from NNSA testified March 23, and to date, no strategy has emerged from the Department of Energy.

An accelerated cleanup plan in theory is a good idea, but it has to be implemented thoughtfully, and that seems to be the problem. For the first time in the history of the DOE cleanup program, facilities that have ongoing missions are being affected. I believe the Department doesn't help itself when it pursues a track of accelerated cleanup while at the same time ignoring the responsibility of replacing facilities that house critical programs for the Department and for other agencies. A good objective to not have a bad outcome.

Today you reiterated the goal of dealing with high-risk materials first. No one would classify the 300-Area as high-risk and frankly, it leaves the community really questioning DOE's choices. Ms. Roberson, can you tell the committee what is the current status of the river corridor contract proposal and efforts to address its current impact on the lab and what are the options for using antici-

pated savings from accelerated cleanup at Hanford to support replacement of facilities for the laboratory?

Ms. ROBERSON. Senator Murray, I probably can't address all of those, but let me please take a shot at as many as I can. The facilities in question were transferred to the Environmental Management portfolio in 2001-2002. By definition, that meant they were excess to mission need. During the next couple of years as we readied ourselves through the procurement process to do the river corridor cleanup, there was indeed a growth in mission, both in NNSA as well as Homeland Security, and so the Department has taken a step back on the cleanup procurement to try to make sure there's no impact to those missions as well as to stay focused on the river corridor cleanup, because those are all important priorities.

I would say, as I sit here today, we are engaged with our Deputy Secretary. We've looked at a number of alternatives. We do not have one that I can share with you, but I think we're very close. That procurement is awaiting action as a result of those discussions.

Senator MURRAY. Okay. Do you have a time line on that?

Ms. ROBERSON. No, I honestly do not have a time line as I sit here today. Since it's a multi-program initiative, my time line is as soon as we have a decision, to move forward, but I can't tell you when the Department will.

Senator MURRAY. Is part of that what the options are for using the savings from the accelerated cleanup?

Ms. ROBERSON. That's actually one. Unfortunately we don't achieve the savings until we achieve the cleanup, so I can't say that savings today are available for that purpose, but I also again can't tell you all of the options that the Department is looking at because we are simply one participant in that decision-making process.

Senator MURRAY. Can you tell me, are we talking a couple weeks or a couple months or 6 months before we have an idea?

Ms. ROBERSON. Actually, as I sit here today, I cannot tell you. We are inputting into the process. I'd be glad to get back to you as soon as we leave here today.

Senator MURRAY. I would really like to know. Obviously the community is waiting. We all want to know where this is going and your response, timely response would be really appreciated.

Ms. ROBERSON. Thank you.

WASTE INCIDENTAL TO REPROCESSING

Senator MURRAY. Let me move on then to another question. The Department is still seeking unilateral authority to reclassify the high-level waste at Hanford, Idaho and Savannah River. Frankly that appears to a lot of us to just be another example of the Department not working with its Federal and State regulators. The Department lost the lawsuit in Federal court and it's now appealing and the President's budget proposes to hold \$350 million from cleanup of those sites aside until this issue is resolved to the agency's satisfaction. You know, frankly, this proposal is being labeled as blackmail to some people.

The proposal certainly seems similar to the Department's former accelerated cleanup account proposal that this subcommittee re-

jected last year and I hope it will reject again this year. The fact is that before the Department lost in court and after, it did have an opportunity to work with the litigants and States to resolve this issue.

Can you tell me, Ms. Roberson, why the Department rejected offers of mediation by the NRDC and the States prior to trial and even more surprisingly rejected the court's request that all parties agree to mediation after the Department lost?

Ms. ROBERSON. Actually, I would have to defer to our Chief Counsel on the specifics of the litigation. What I can say is that there was conversation among the parties to the lawsuit. I won't try to describe when or how that happened, because that process actually would have been managed by our General Counsel rather than by the Office of Environmental Management, but I would like to say a few things.

I have heard the term being used that this looks like blackmail, but Senator Murray, I have to say to you, we haven't considered changing nary a cleanup agreement at any site. We are simply trying to implement what we've already agreed to in those cleanup agreements at every one of those sites.

Senator MURRAY. But you lost the battle in court.

Ms. ROBERSON. We are appealing the decision in court, but even before we lost the lawsuit in the Ninth District, we were implementing those agreements we have with our regulators in each State, and we are trying to continue to implement those agreements. We have not proposed a single change to a cleanup agreement in any of those States.

Senator MURRAY. Well, it does appear to a lot of people that DOE's the only one who thinks legislation is necessary to resolve this issue. It seems even when our States attempt to reach common ground, they are just met with steadfast resistance to maintaining regulatory oversight on this matter, and it just is disheartening to all of us.

Ms. ROBERSON. Well, we continue to have a dialogue and I think a fairly successful dialogue with the States even today.

Senator MURRAY. They don't feel that way.

Ms. ROBERSON. Well, that's unfortunate. I appreciate that insight. That's surprising to me.

Senator MURRAY. Well, I think everyone I've talked to wants to resolve this issue, but they feel like the Department is just resisting any attempts to speak with the States, to work with them to find common ground. You're simply giving us legislation to override an issue and thus it is not acceptable.

Ms. ROBERSON. We are working even today with the States on a path forward, we absolutely are. It's unfortunate if we have a State that doesn't believe that that's our goal.

Senator MURRAY. Let me just give you a personal appeal. Can you make a concerted effort to sit down with them to really listen to their concerns and to find common ground on this issue?

Ms. ROBERSON. Absolutely.

Senator MURRAY. Okay. I take you at your word on that and I will wait to hear from our States that they feel that they are actually working with you.

Ms. ROBERSON. Okay.

HANFORD EMPLOYEES EXPOSURE TO TANK FARM VAPORS

Senator MURRAY. Let me raise another issue and this is really a critical one for our State. Ms. Roberson, as you know, there has been a serious issue at Hanford related to continued exposures of workers to vapors escaping from the tank farms. It's causing workers to seek medical attention on-site and often being taken to local hospital emergency rooms.

Related to that vapor issue but not confined to these medical problems is the Hanford Environmental Health Foundation which is under a DOE contract to provide medical care at the site who's now facing allegations of supervisor misconduct, fraud and medical record tampering. The fear is that this Hanford Environment Health Foundation has done these things due to financial considerations and/or perhaps pressure from contractors to limit the number of work days lost which can affect the contractor's own financial incentives.

In fact, in last Sunday's Washington Post, it's reported that the DOE's own inspector general, as you know, found that, and I want to read from it, "For 9 out of 10 private contractors that perform environmental cleanup at old bomb-making sites from Washington State to South Carolina, the audit found that the Department of Energy maintained inaccurate and incomplete accident and injury data."

Frankly, given the significant coverage on these issues that we've received in the national and Washington State press, I was surprised you didn't address them in your own written statement, but I'm even more surprised that your written statement makes claims on improved worker safety by citing the lost work day cases when your own inspector general says the Department underreports such events. There are many investigations going on right now at Hanford related to the tank vapors and HEHF, and I hope we're going to get some answers from those investigations, but I really fear that the Environmental Management Program has lost considerable credibility with workers and their families on these issues.

Cleanup of nuclear waste is a very difficult task. You and I both know that it involves many known and unknown dangers. We ask a lot of our workers who are on-site and it seems clear to me that we need to provide assurance that we know what we are doing, that we are taking real precautions and that we have reliable investigations when necessary.

The National Institute of Occupational Safety and Health, NIOSH, has been on-site, but DOE limited its review authority to the vapor issue. I don't believe that DOE has requested OSHA or the NRC to play any role. It seems reasonable to consider if it would make sense to have OSHA and the NRC regulate health and safety.

Do you believe that DOE is responsibly on top of these vapor and medical issues?

Ms. ROBERSON. Senator Murray, actually, I do believe. Specifically on the tank farm vapors, I think our field operations has been fairly aggressive. They've had three external independent reviews from organizations that have expertise in the occupational medicine area and they've offered advice on improvements and we've

moved forward with those improvements, and where we can get good advice to improve, we're going to continue to do that. That's our commitment.

I won't speak on HEHF since that is an ongoing investigation. I don't think that I can speak on that, but what I can say is if there is a determination of any misconduct, the Department will react swiftly and strongly. There is no doubt in my mind that we will.

IG REPORT ON SAFETY PERFORMANCE

I'd like to, if I could, respond to—and even though the system that is in question belongs to the Assistant Secretary for Environment, Safety and Health, I'd actually like to respond because the IG draft report was fairly specific to the Environmental Management program. I mean, I have to say unequivocally I disagree with some of the information presented as fact as well as the conclusions reached in that draft report.

Senator MURRAY. You disagree with the IG?

Ms. ROBERSON. Yes, and I have responded. There are two specific points I'd like to make. There are many others, but I would like to address two specific points. One assumption was that this database provided data that was used by Environmental Management to determine the status of its safety performance. That is incorrect.

In 2002, OSHA changed the criteria for reporting in the system and to smooth the path for transitioning to the new criteria directed that nobody should spend time trying to catch up with the old system. DOE did the same. DOE took the same action.

As the Assistant Secretary for Environment, Safety and Health said in her opening comment, this is a paper-intensive system and it's prone to quality assurance problems and lag time. In 2002, we identified this as an issue in our program and discontinued using it for that purpose. The very law that the IG cited in its draft report as being the basis for identifying what data was not being transferred, is the law that we also look at in our operations to make determinations as well, too.

So the law that provided the basis of their assumption that there was underreporting, is the mandated law for the contractors to keep and in fact, based upon the IG's draft report, they are obviously keeping it up to date. That is the law that our facility representatives and our managers look at in the field and we also look at as well.

The Department has undergone in the last year an initiative to simplify the translation of that data from the OSHA logs to its headquarters system, but that hasn't alleviated the requirement for us to look at their logs in the meantime which is what we have done.

Senator MURRAY. I appreciate that. I would like to see your response back to the IG, but I also think that there's—don't you think there's something more we can do to make sure the workers and families feel that their—

Ms. ROBERSON. Absolutely.

Senator MURRAY [continuing]. Health and welfare is the Federal Government's first priority because that certainly doesn't feel like it today.

Ms. ROBERSON. Absolutely, and I think you probably know in the tank farm even as late as last week, we talked with our site operations and our contractor and we've taken additional actions there. We are absolutely committed to doing this work and doing it safely, and we are interested in the expertise and advice of any that can help us to continue to improve it because that's what we have to do. So that is our commitment, and we will continue to be focused on that and look for improvement wherever.

Senator MURRAY. Will we be seeing recommendations from your agency on what we can do perhaps to have OSHA and NRC regulate health and safety? Will you be making any recommendations like that?

Ms. ROBERSON. I'm not personally familiar with whether the Department will make those recommendations, but I know the Secretary is looking forward to the results of the reviews and investigations he's initiated, and I think those will inform any decisions going forward from there.

Senator MURRAY. Mr. Chairman, I see you've returned. I have one more question. I'm happy to wait until you——

Senator DOMENICI [presiding]. Give it. Let's go.

ENERGY EMPLOYEES OCCUPATIONAL ILLNESS COMPENSATION PROGRAM

Senator MURRAY. Ms. Cook, your office has authority over the Energy Employees Occupational Illness Compensation Program Act. In fact, the Department makes a big deal about its efforts to implement the program and is currently opposed to efforts to move implementation from DOE to the Department of Labor which many of us would believe would be much more effectively operating the program and serving as the willing partner.

Specifically related to Hanford, it's my understanding that you intend to end the medical screening program for former workers at Hanford at the end of this current fiscal year. It is estimated that there are 2,700 former workers with past exposures who have actively indicated an interest in an examination from the site and there are 600 who are awaiting appointments that won't be available due to budget cuts.

Can you tell me why your budget proposes to end the Hanford former worker screening and how you justify such an action in light of such an incredibly big need?

Ms. COOK. Yes. First off, the budget does not define that we are going to end the former worker program at all. What we are going to do, though, is make it more effective and efficient for exactly the reasons you just pointed out. The former worker program was started several years ago. At the current time, we have 14 different pilot projects out at different sites all around the complex. Many sites are waiting to participate in the former worker screening program.

What we intend to do through this year and into 2005 is to move forward with a nationwide former worker screening program that provides more timely and more service without paying overhead for 14 projects throughout the complex, so at all of the sites, all of the former workers will have access to a screening program locally. And if local expertise isn't available, then we will connect them

with someone nearby, but we do not intend to end any former worker program at any site.

Senator MURRAY. So the screenings still go on at the Hanford site?

Ms. COOK. Yes.

Senator MURRAY. At the site?

Ms. COOK. Yes, absolutely, but it will be part of the national program and not individual programs at each site, so it will be managed nationally.

Senator MURRAY. And the 600 that are awaiting appointments will get appointments?

Ms. COOK. Absolutely.

Senator MURRAY. As well as the 2,700?

Ms. COOK. Absolutely.

Senator MURRAY. Thank you, Mr. Chairman.

Senator DOMENICI. Thank you very much, Senator. First let me say, and you've had a pretty good grilling today. I'm glad you got to offer your views, and let me say I wish we could be here predicting that your recommendations would be followed, but it seems to me that in some areas it will be very difficult.

I have questions in each area, but if I don't get them done today, I'll get them to you and I would appreciate your answering them at your earliest convenience.

PLUTONIUM TRACES AT WASTE ISOLATION PILOT PLANT

I noted in a recent press article about the detection of microscopic traces of plutonium in the sampling at WIPP. I understand that the quantity is far below the regulatory concern, but I'm curious whether that detection could be indicative of more serious issues. My question is, please describe your understanding of this situation and address my concern about these samples that could indicate a more serious problem.

Ms. ROBERSON. Senator Domenici, we have multiple independent monitoring sources and for the second quarter in 2003, in some cases it's monthly; in some cases it's quarterly. This was monthly sampling, I think, for June of 2003. That sampling or that analysis was conducted using the most capable and sensitive equipment available to us.

NEW MEXICO CLEANUP AGREEMENT

Senator DOMENICI. Thank you very much. Ms. Roberson, let me thank you for your willingness to return to the negotiation table to work out an acceptable cleanup agreement between DOE and New Mexico. As a result of these negotiations, \$43 million in additional money can be applied toward meaningful cleanup. You can be sure that I will continue to watch the matter and I hope you will too, to ensure that cleanup stays on track.

Does this agreement have enforceable deadlines and standards to ensure that cleanup is accomplished and we won't find DOE and the State fighting over the same old issues and compromising the cleanup?

Ms. ROBERSON. Senator, it does indeed include enforceable milestones where Federal or State standards exist, and it would include those where they do not exist. It would include a process by which

we would go through and work with our regulators to establish them.

I'm sure this is not the end of the challenges that the parties will have to work together on, but it certainly establishes a process through which we can resolve those issues as we go forward and achieve the cleanup as we've laid out.

WORKER SAFETY SITE PROFILES

Senator DOMENICI. Let me say, Ms. Cook, last year the DOE testified that it was in the process of developing site profiles and to pull together the necessary site data in order to speed up the case approval process for workers that were made sick while working for the Department. DOE's testimony stated that by developing a complete understanding of the occupational hazards at each of the DOE sites, it will help the doctors in developing the claims as to exposure hazards a worker may have been exposed to.

The question to you is, where do we stand on the development of site profiles and how much is being spent in 2004 and how much will you do in 2005?

Ms. COOK. Yes, to answer that I need to introduce to Bob Carey that he really wanted to be closely involved, as did the Undersecretary in this program. And so what they did is bring in Mr. Carey to bring in the program as a whole with only that responsibility and directly reporting to the Undersecretary and to the Secretary, and Bob will tell you about where we are on the site.

Senator DOMENICI. What is your name and what do you do?

Mr. CAREY. Sir, my name is Bob Carey. I'm a Senior Policy Advisor in the Office of the Secretary and this elevation of the Office of Worker Advocacy to a direct report to the Under Secretary Card happened to coexist, happened at the same time as my return to active duty, so I was assigned to this program.

I think there may be some misunderstanding as to the relationship between the site profiles that NIOSH does as part of the dose reconstruction process and the site profiles that some people have been advocating for this program.

For the site profiles that NIOSH does for the Part D Program for the dose reconstructions, it's regarding radiation, a relatively well understood, quantifiable and discrete program where the causal relationships are pretty well understood. For the other toxic substances that Part D also covers, the Department of Energy Program, those causal relationships are not nearly as well understood. A lot of these substances hadn't even become known to be toxic except in the last couple decades. Prior to that we didn't even have a lot of records on these issues.

Because of that, the cost benefit analysis that we've done to date has not indicated that such large scale discrete site profiles would be beneficial. We believe they cost several million dollars and they take a year or 2 to complete and that they don't necessarily provide any additional data that would be that useful to the Physicians' Panels.

And the fact of the matter is we believe we already have sufficient information for these Physician Panels. The statute requires that we provide all available information. It does not state that we are required to provide additional analysis like the statute requires

NIOSH to do for dose reconstructions. With that available information we currently provide, we believe we provide more information than other compensation programs do, and we provide a large volume of information already to these physicians.

The fact of the matter also is we have to look at this cost benefit analysis in terms of what we provide to the applicant with our positive determination. The Department of Labor's Part B Program has a 50 percent or greater standard of causation for the radiation-induced cancer, whereas ours is not as likely to be a significant factor in the causation, aggravation or contribution to an illness.

So we've had positive determinations where we've had a 2½ percent probability of causation. Given all those issues and the fact that we don't make a disability determination and we don't make a compensation recommendation in our physician panel process to the State worker's compensation boards, we do not believe that these large-scale site profiles that some people have been talking about would be beneficial in the net.

Senator DOMENICI. Well, let me tell you, all that statement notwithstanding, we are in a mess because the claimants clearly don't believe us anymore, and things are going too slow and we're not getting anybody compensated. And I suggest while the bill is a little drawn, it doesn't provide that much per individual that we shouldn't get on with it. I think it's got a cap of \$15,000, doesn't it?

Mr. CAREY. No, sir, our program does not have any cap. In fact, under the Part D Program, the one that the Department of Energy runs, we provide no direct Federal benefit. We provide a positive physician panel determination which we can then use to issue to a contractor—

Senator DOMENICI. Who pays the money?

Mr. CAREY. The contractor or the insurance company that the contractor may have hired is the one that ultimately pays the money. If we have a current contract with that contractor, we can then reimburse them under those contracts, but the States are the ones that direct the money, the payment of the money, sir, under the Part D Program.

Senator DOMENICI. Well, straighten me out. What are they complaining about?

Mr. CAREY. Sir, we initially vastly underestimated the scope of this program and because of that underestimation, we underestimated how long it was going to take to set up the program and how much we were going to have to invest in order to establish this program.

We now believe that we have established this program, and since we received that \$9.7 million reprogramming for fiscal year 2003, we received that in October of 2003, we've tripled our case processing up to the physician panels; we've increased our physician panel determinations approximately six-fold; we've also been able to put together a strategic plan based upon a top to bottom review to be able to eliminate the entire backlog of current and future backlog applications by the end of calendar year 2006.

If we thought we could hire enough physicians in order to be able to panel these panels faster and in greater quantities than we currently believe, we'd want to do that faster.

Senator DOMENICI. Who's in charge of the program now, the Secretary?

Mr. CAREY. Under Secretary Card is who I directly report to, sir.

Senator DOMENICI. Well, I'll tell you, this isn't in the scheme of things, may not be for the Department a very big program or very significant.

Mr. CAREY. It's my life, sir.

Senator DOMENICI. What?

Mr. CAREY. It's my life.

Senator DOMENICI. Well, I'm glad it's somebody important's life because there's an awful lot of folks that don't think we know what we're doing.

Mr. CAREY. Sir, my father—I'm sorry, sir, go ahead.

Senator DOMENICI. And we didn't know what we were doing. It was wrong for a long time. Now you tell me it's going to get right and I don't question you except you've got to understand, we know about the doctor issue, but you've got to understand that you've got to get going.

Mr. CAREY. Yes, sir.

YUCCA MOUNTAIN FISCAL YEAR 2005 BUDGET REQUEST

Senator DOMENICI. Okay, now let me talk a little with Dr. Chu. Let me first thank you and congratulate you. I wish we could tell you that we could move forward with dispatch, but you understand the problem and the President's budget requests \$880 million for Yucca. A significant portion of this funding is to be paid from fees assessed which you're aware of. The fund will collect \$749 million this year, the budget process that the annual receipts be reclassified as discretionary funds and then appropriated.

As a former budget committee chairman, I know that you can't wave a magic wand to reclassify these fees. It requires legislation and some degree of cooperation.

I'm not optimistic that we are going to accomplish that this year. However, if we fail to get the agreement and reclassify the fees, the Senate Budget Resolution assumes a level that you are not satisfied with of \$577 million. Now, that's not the end because we've got to go to conference with the House. You're aware of that. If Congress only provides \$577 million, what activities will the Department be forced to defer and will this significantly delay the opening?

Dr. CHU. Senator, thank you very much for your support all these years. We have looked at this budget situation very carefully, and the reason we ask for \$880 million is we need the funding to open a repository in 2010. If we get a level of funding of \$577 million in 2005, we will be able to deliver the application because that's our highest priority. That's our first milestone. But we will not be able to achieve our goal of 2010 without getting the full funding.

Senator DOMENICI. But when you get the first step that you just described, the licensing?

Dr. CHU. Yes.

Senator DOMENICI. You think you can do that?

Dr. CHU. Yes. We will be able to do a license application because we are in the process of completing that in 2005. Since our sched-

ule is December 2004, it's really the first quarter of 2005 we intend to deliver the license application.

Senator DOMENICI. I hope you can. Isn't that being contested also?

Dr. CHU. That remains to be seen.

Senator DOMENICI. That licensing is being contested also just like everything else?

Dr. CHU. Not yet.

TRANSPORTATION MODE AND ROUTES FOR YUCCA MOUNTAIN

Senator DOMENICI. Okay. It's my understanding that the Department has not made a final decision as to whether it will use rail or truck as the transportation mode of waste to Yucca or decided on a specific route. When will the Department make this decision and begin the environmental impact study?

Dr. CHU. In our final environmental impact statement, we have indicated that mostly rail is our preferred transportation mode, but we have yet to issue a formal record of decision on that. In my testimony, I say we expect to do that very shortly.

And as to specific routing, this is part of a whole planning process with the stakeholders and the State and the local governments. And we are just starting that process right now and we do not anticipate to identify a suite of routes until probably fiscal year 2006. That's the preliminary plan, but we'll deal cooperatively with all the stakeholders.

Senator DOMENICI. Well, I'm amazed, I mean if you think you're over the hurdles, you know, transportation is a big issue, too, among people. Routes will be a big issue. I want to suggest to you that I have found one of the most intriguing responses to be a detailed history of the U.S. Navy and its ships and where they are on a given day and how many nuclear reactors are floating around the oceans and seas of the world. There are lots of them. You know, some of them have two on board. They are now permitted to land, to dock at every dock in the world except New Zealand, and that's an old thing.

Now, when we worry about safety, isn't it amazing that there's probably about 150 nuclear reactors traveling the waters of the ocean and from time to time docked in docks that are full of ships that are adjacent to them, to development, and nobody complains. I just tell you that it's pretty interesting.

When we sit around and worry so much, the peoples of the world let these dock with, you know, a battleship has two of them.

Dr. CHU. Senator, I totally agree with you. You know, worldwide, there's excellent safety records in transportation of nuclear materials.

WASTE INCIDENTAL TO REPROCESSING

Senator DOMENICI. Let me talk a minute to you, Ms. Roberson. The budget provides \$350 million that can be used to address the cleanup of waste incidental to reprocessing, WIR, located in Washington, Idaho and South Carolina. I understand that the Department is allowed to reprocess some of the WIR waste in Washington and Idaho. It would generate transuranic waste streams that DOE intends to send to WIPP. Thus far I'm correct, am I not?

Ms. ROBERSON. The one adjustment I would make in Washington, it's not even waste from reprocessing. The source, the actual source is transuranic waste.

Senator DOMENICI. Well, to date, the Department has discussed a strategy with Washington, Idaho and South Carolina, but the State of New Mexico was yet to be included in these discussions. Will you commit here to including New Mexico in these negotiations and work with the State in developing a solution?

Ms. ROBERSON. Absolutely, Mr. Domenici, and we actually did start that a couple weeks ago with the workshop hosted by EEG and I think it was a very successful workshop in providing information to all the parties that allowed a platform for future conversations, so you do have my commitment.

TRANSURANIC WASTE

Senator DOMENICI. Okay, what is the basis for determining what transuranic waste is and what is the process by which you believe you can remove the fission products? That would mean we're going to meet the criteria for permanent disposal at WIPP.

Ms. ROBERSON. The basis for determining—TRU waste is actually defined by the permit for disposal at WIPP and we must satisfy the permit requirement before any such material can go there.

Senator DOMENICI. Okay. We have about 20 other questions and I have about 20 other people lined up, so I'm just going to give you those.

Ms. ROBERSON. Thank you, sir.

ADDITIONAL COMMITTEE QUESTIONS

Senator DOMENICI. I'd like to thank the witnesses. I'm sorry that we talked more than you, but that's the Senate. I think some chairmen do a better job than I and just say that only two people will talk. The rest of you can wait for your questions, but that's not so easy.

I'd like to remind members that the subcommittee will keep the record open for 2 weeks for additional questions. And to our witnesses, you have 2 weeks upon receipt of the questions to provide answers. If there are too many and are too bulky, just tell us you need another week on some of them. Just don't let us think you're not cooperating.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO THE DEPARTMENT OF ENERGY

QUESTIONS SUBMITTED BY SENATOR ROBERT F. BENNETT

REMOVAL OF MOAB URANIUM MILL TAILINGS PILE

Question. The State of Utah has raised significant concerns regarding the instability of the Moab Atlas tailings pile over time and the need to remove the tailings from their current location on the banks of the Colorado River. Where is the Department with regard to its determination about whether to remove the tailings pile from the banks of the Colorado River?

Answer. The Department is now preparing the draft environmental impact statement (EIS) for remediation of the tailings in cooperation with other Federal agencies, as well as State, Tribal, and local governments. The Department plans to issue

the draft EIS for public comment in the fall and to identify a range of remedial alternatives including no action, stabilization in place, and disposal of the tailings at one of three potential off-site locations. The National Environmental Policy Act regulations require that the no action alternative be evaluated as well as all reasonable alternatives. We will allow adequate time for public review of the document; a minimum of 45 days is required by regulation, and more time can be granted if needed. The Department has not selected a preferred alternative at this time and would like to obtain public input on the draft as an aid in making our selection. We will identify a preferred alternative in the final EIS and will brief interested members of Congress at the earliest opportunity when we have made a selection. The Department's current schedule anticipates issuance of a Record of Decision for the selected remedial action in 2005.

SALT CAVERN DISPOSAL REMEDIATION ALTERNATIVE

Question. I understand that there is some interest in a new remediation alternative called salt cavern disposal because of the hope that it may be both protective of the environment and economically competitive with the other remediation alternatives already listed in the Draft EIS. Has DOE investigated this option and if so, what conclusions have been reached with regard to this alternative?

Answer. The Department is considering an alternative to dispose of the uranium mill tailings in mined salt caverns. Conceptually, such disposal caverns would be created by solution mining in the salt beds of the Paradox Formation beneath the Moab site or other possible locations, such as the commercial potash mine site approximately 6 miles downstream from Moab. This alternative would involve withdrawal of significant quantities of Colorado River water (on the order of 2,000 gallons per minute for 20 years). The water would be used as part of the solution mining process and would become saturated with salt, generating brine that would have to be disposed of by deep injection well, or solar evaporation pond, or other alternative methods for disposal of brine. Disposal for uranium mill tailings in mined salt caverns would be a unique, first of a kind methodology and is an unproven approach to uranium mill tailings disposal that could take at least 20 years to complete and for which there are several areas of technical, geological, and operational vulnerabilities and uncertainty. The National Academy of Sciences recommended that DOE "take advantage of the experience gained from previous DOE projects and the UMTRA project." The Department has not yet reached a final conclusion regarding this alternative.

Resolving these uncertainties sufficiently so the Department could be sure that this alternative is technically feasible would require significant investment in additional studies, including injection well testing, subsurface characterization, geological and salt cavern performance modeling, and an overall system performance assessment. Such studies would require a multi-million dollar investment and several years to complete, with no guarantee that the investment would demonstrate that this alternative is viable. The Department has not yet reached a final conclusion regarding this alternative.

QUESTIONS SUBMITTED TO THE OFFICE OF ENVIRONMENTAL MANAGEMENT

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

WIPP DETECTION OF PLUTONIUM

Question. I noted in a recent press article about the detection of microscopic traces of plutonium in the air sampling system at WIPP. I understand the quantity of plutonium is far below regulatory concern, but I am curious whether such detection of plutonium could be indicative of a more serious issue. Please describe your understanding of the situation and address my concern that these samples could indicate a more serious issue in the future.

Answer. The detection of a few microscopic particles of plutonium during the spring of 2003 is not indicative of a more serious issue; rather, it indicates the sensitivity of one of the methods DOE uses to ensure serious issues do not arise. With DOE's support, the Carlsbad Environmental Monitoring and Research Center (CEMRC), the Environmental Evaluation Group (EEG), and Washington TRU Solutions (WTS) have developed sensitive radiochemistry capabilities that allow them to detect traces of plutonium in composite samples of air filters collected over weeks and months. The amounts detected were barely above the detection limits of these laboratories' analytical capabilities, and several of the samples analyzed from this period did not detect any traces of plutonium. The laboratories have analyzed sam-

ples taken subsequently during the summer of 2003 and have not detected any plutonium in them; they are continuing to analyze similar samples taken since the ones in which plutonium was detected. In light of the laboratories' extremely sensitive analytical methods, the environmental conditions around the site, and the Waste Isolation Pilot Plant's (WIPP) 5 years of operations, DOE anticipated that these types of particles would eventually be detected.

Although these particles may be the result of WIPP's operation, their source is uncertain at this time. CEMRC, EEG and WTS are working to identify the source. The continuous air monitoring devices used to protect workers, the public and the environment did not detect anything of significance during this period. In addition, CEMRC's analysis of ambient air samples taken within 100 meters of the exhaust shaft and elsewhere did not detect any levels of plutonium during this period above those resulting from fallout from past nuclear weapons testing.

LOS ALAMOS CLEANUP

Question. Ms. Roberson, thank you for your willingness to return to the negotiating table to workout an acceptable cleanup agreement between DOE and the New Mexico Environment Department for Los Alamos National Lab. As a result of these negotiations, \$43 million in additional funding can be applied toward meaningful cleanup this year. You can be sure I will continue to watch this matter very closely to ensure that cleanup stays on track. Does this agreement have enforceable deadlines and standards to ensure that the cleanup is accomplished and we won't find DOE and the State of New Mexico fighting over the same old issues and compromising cleanup?

Answer. The consent order as agreed upon by the Department and the State of New Mexico does indeed have specified enforceable deadlines and cleanup standards. Where standards do not exist, the consent order sets forth a process to establish appropriate risk-based standards.

OFFICE OF FUTURE LIABILITY

Question. The budget provides \$8 million to establish the new Office of Future Liability that will take over environmental cleanup not already assigned to the Office of Environmental Management. The budget indicates that this will include 2,000 contaminated sites that must begin cleanup by 2025. I believe that in DOE's zeal to close the EM program by 2035, it is ignoring significant waste streams that must be addressed. I am skeptical that creating an entirely new bureaucracy to address the future cleanup is the most cost effective means of achieving cleanup. How much does the Department expect the Office of Future Liability will spend for cleanup over the next 20 years and how many people will the new office need to manage this massive cleanup effort?

Answer. The Office of Future Liabilities (FL) was established as a planning office to develop comprehensive estimates of the Department's future environmental liabilities, including decommissioning and decontamination of excess facilities and disposition of excess nuclear materials in order to assist DOE in developing the best organizational structure for managing that cleanup. FL will work with the line DOE science, energy, and defense organizations to develop the scope, cost and schedule for all the requirements and identify organizational options for managing these requirements. For the near-term budget window, four full-time equivalents are requested to support the planning responsibilities of the office. DOE has not decided what line office will be charged with managing future liability.

Question. Has the Department determined whether or not creating this new office and bureaucracy will lower the cost of cleanup, and is there any data to validate this decision; and will there be a transition plan for experienced staff from one office to another?

Answer. The Department's Top-to-Bottom Review of the Environmental Management program recommended the accelerated cleanup of the legacy of the Cold War, the mission the Office of Environmental Management was designed to carry out. Defined, finite work scope has been key to focusing the active cleanup mission on accelerated completion with the benefits of reducing risk and life-cycle cost while accelerating schedule and cleanup. However, long-term waste treatment and disposal will continue beyond the completion of the current EM baseline (scope) program. So that we do not diminish the momentum we have gained with accelerated EM cleanup, the Department has proposed the new planning office to look at options for managing the long-term liabilities and in so allowing the accelerated pace in achieving near-term cleanup results to continue unabated. We believe these are prudent steps to effectively manage our near-term cleanup responsibilities while establishing a visible process to address future liabilities.

We do not foresee a need for a transition plan at this planning stage as longer-term liabilities may involve different issues and different skill mixes compared to the near-term cleanup activities.

MANAGING FUTURE WASTE COSTS

Question. EM is negotiating with other DOE offices to require that they take over all environmental responsibilities for waste they generate in the future. I have many concerns with this approach, because EM is the only office qualified to deal with the waste cleanup. On the other hand, I recognize that every Office in the Department must be more sensitive to the costs of managing waste streams they create. It seems to me there could be better ways to force each office to make a serious effort to reduce these costs. One option might be to require that an office which generates wastes set aside sufficient funds that would be used by EM to manage the cleanup. Has the department considered this option and would it make program managers more considerate of waste management costs?

Answer. The Department has considered the option of a waste generator charge-back program. Our assessment has indicated that implementation of a charge-back program is difficult to manage and has the potential to increase costs because of the additional accounting burden. In addition, the Department has the risk of augmenting an appropriation if the charge-back program does not collect the exact funding necessary for operations. Should the generating program exceed the level of appropriated funds, EM will be required to supplement the remaining cost of newly generated waste operations. Compounding this approach, a charge-back system would not enable EM to focus its efforts strictly on its core mission of accelerated risk reduction and site closure for legacy activities.

WASTE DEPOSITS AT WIPP

Question. The budget provides \$350 million that can be used to address the clean-up of Waste Incidental to Reprocessing (WIR) located in Washington, Idaho, and South Carolina. I understand that if the Department is allowed to reprocess some of the WIR waste in Washington and Idaho it would generate transuranic waste streams that DOE intends to send to WIPP. To date, the Department has discussed this strategy with Washington, Idaho, and South Carolina; but the State of New Mexico has yet to be included in these discussions. Will you commit to including New Mexico in the negotiations and work with the State on developing a solution?

Answer. The State of New Mexico was represented in some of the discussions the Department has had with affected States on waste incidental to reprocessing. Pursuant to my commitment to you, since the hearing, we have stepped up our efforts to discuss this matter with the State, including productive conversation between Governor Richardson and the Deputy Secretary. We are committed to working with the State and the State's elected representatives to resolve issues relating to transuranic waste.

Question. What is the basis for determining what transuranic waste is and what is the process by which you believe you can remove the fission products that would meet the criteria for permanent disposal at WIPP?

Answer. Transuranic (TRU) waste is defined by the Waste Isolation Pilot Plant (WIPP) Land Withdrawal Act as "waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes per gram of waste with half-lives greater than 20 years, except for (A) high-level radioactive waste, (B) waste that the Secretary of Energy has determined, with concurrence of the Administrator [of the Environmental Protection Agency, EPA], does not need the degree of isolation required by the disposal regulations, or (C) waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with part 61 of title 10 Code of Federal Regulations (CFR)." "High-level radioactive waste" is defined in the Nuclear Waste Policy Act (NWPA) as "(a) the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocess and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and (b) other highly radioactive material that the [Nuclear Regulatory] Commission, consistent with existing law, determines by rule requires permanent isolation."

DOE believes that certain tank waste in Idaho and Washington is not high-level waste but rather is TRU waste. This is largely for two reasons.

First, DOE believes that this waste is not "highly radioactive material resulting from the reprocessing of spent nuclear fuel." Rather, in the case of Idaho, the waste, known as "sodium-bearing waste," is waste primarily from decontamination activities and wastewater resulting from operations at the Idaho Nuclear Technology and Engineering Center (INTEC). This waste also contains trace amounts of radioac-

tivity from first-cycle reprocessing wastes resulting from heels from these wastes left in the tanks after the first-cycle reprocessing wastes were removed and calcined in anticipation of their disposal in the spent fuel repository, along with some second- and third-cycle reprocessing wastes that remained in the tanks after most of that waste was also calcined in anticipation of disposal in the spent fuel repository. These wastes, approximately 1 million gallons, are currently being stored in the same tanks that were used to store waste from reprocessing. The total curies that have been removed and calcined represent on the order of 98 percent of the total INTEC curie inventory generated through spent fuel reprocessing. In the case of Washington, there is waste in approximately 20 tanks at Hanford that DOE believes resulted from decladding of fuel prior to reprocessing and from the cleanup of plutonium that occurred after the reprocessing of spent fuel. In DOE's view, this waste does not result "from reprocessing," whose purpose is to recover uranium and plutonium, but rather from activities necessary to prepare the fuel for reprocessing and to remove impurities from the recovered metals to meet weapons production purity standards. To put the point a little differently, this waste is very different from waste from the "first solvent extraction or similar process by means of which uranium and plutonium are recovered from irradiated reactor fuel." That was the definition of "high level waste" used by the Consultation and Cooperation Agreement between the State of New Mexico and DOE which contained the original prohibition on disposal of high-level waste at WIPP and that we believe was at the heart of what Congress had in mind when it defined "high-level waste" in the NWA. The WIPP Land Withdrawal Act specified that this Agreement was unaffected by the WIPP Land Withdrawal Act. The radionuclide concentrations in these wastes are substantially lower than those contained in wastes from the first cycle of spent nuclear fuel reprocessing.

Second, DOE believes that this waste meets the definition of "transuranic waste" and has other radiological characteristics that make it similar to other defense TRU waste in the complex that is being disposed of at WIPP, i.e., alpha-emitting radionuclide concentrations that are greater than 100 nanocuries per gram.

With regard to the removal of fission products, with respect to the Idaho waste, as explained above, the current tank inventory in Idaho represents about 2 percent of the radioactivity from the initial spent fuel waste inventory, because 98 percent of that radioactivity has been calcined. This has also resulted in removal of on the order of 98 percent of the cesium, strontium, technetium and actinides from reprocessing that the waste originally contained. As for the Washington waste, it never contained fission products from reprocessing operations to begin with (except for possible limited cross-contamination in three tanks due to the tanks' having been used for multiple purposes during their operating life times), and it is expected to contain less than 1 percent of the radioactivity from the Washington tanks.

WIPP does not have specific radionuclide or fission product limitations for acceptable waste. In fact, it is specifically statutorily authorized to receive remote-handled transuranic waste (RH TRU), which generally contains significant amounts of fission products. Instead, the relevant limitations in WIPP's waste acceptance criteria are fourfold. First, there is a statutory cap on the volume of RH TRU that WIPP may accept. While much of the treated TRU from Idaho and Washington is expected to be contact-handled, some is expected to be remote-handled, and disposal of that waste at WIPP will have to comply with the statutory volume limits. Second, WIPP has received approval from EPA to accept remote-handled waste, but it is still awaiting action from New Mexico on DOE's request for modification of its Resource Conservation and Recovery Act (RCRA) permit, so again, no remote-handled TRU from either site would be able to go to WIPP until that approval has been received. Third, WIPP has a performance assessment demonstrating that disposal of a total assumed volume of contact-handled and remote-handled transuranic waste with certain characteristics satisfies EPA's standards for disposal of transuranic waste. The tank waste from Idaho and Washington under consideration for WIPP disposal has characteristics consistent with the assumptions in that performance assessment and therefore can safely be disposed of there. Finally, DOE has submitted to the State of New Mexico a request for a modification of its RCRA permit that would require it to submit a further Class III RCRA permit modification for tank waste it is seeking to dispose of at WIPP. If that modification is approved, DOE would have to comply with its conditions as well.

\$500 MILLION SETTLEMENT FOR BNFL

Question. Earlier this week, trade publications reported that DOE had agreed to pay British-owned BNFL for cost overruns related to cleanups in Tennessee and Idaho. What can you tell me about the status of these negotiations between the U.S.

and British officials and if there is any truth to the fact that DOE would provide \$500 million to compensate BNFL for what appears to be a bad investment?

Answer. DOE is working to resolve several outstanding contract issues under the BNFL contracts in Tennessee and Idaho. There is no final agreement at this time, but any resolution we reach with BNFL will only be reached if we believe it is in the interest of the taxpayers consistent with the programmatic interests of the Department and will allow us to meet our cleanup commitments.

WASTE INCIDENTAL TO REPROCESSING (WIR)

Question. This budget provides \$350 million to be spent to fund cleanup of nuclear material designated as Waste Incidental to Reprocessing (WIR). The budget states that enormous savings can be achieved if DOE is able to reclassify nuclear waste streams and follow through with cleanup remedies that have been negotiated with each State. However, a recent Idaho court decision is blocking final disposition of the material. Until this court ruling is resolved or legislation is passed, a final remedy cannot be prescribed. Can you please provide what you believe to be the total cost estimates to clean up the material in Washington, Idaho and South Carolina if you must treat all of this material as high level waste, verses the potential cost savings that would be realized if some of this material can be treated as waste incidental to reprocessing?

Answer. The Department's baseline life-cycle cost for implementing its accelerated cleanup plans at Washington, Idaho and South Carolina is \$52 billion, if some of the waste can be treated as waste incidental to reprocessing. If the Department must treat all of the material as high-level waste, the life-cycle cost increases to more than \$138 billion. Under this worst-case scenario:

- Retrieval of all tank reprocessing wastes and treatment for disposal in a geologic repository could require as much as \$69 billion over the current Environmental Management program life-cycle cost baseline.
- As much as an additional \$17 billion—and possibly more—would be required to exhume and dispose of tanks and associated components in a geologic repository.
- It is difficult to estimate the additional costs the Department would incur in terms of Federal repository fees. Under existing cleanup baselines, the Department expects to produce approximately 20,000 canisters of high-level waste for disposal in a geologic repository; the fee associated with these canisters is estimated to be \$10 billion. Under a scenario in which all tank reprocessing wastes currently anticipated to be removed and disposed of as low-level waste are instead prepared for disposal in a repository, the new baseline could approach 200,000 canisters. Thus, the fees could be significantly greater. This canister estimate does not include exhuming the tanks themselves nor associated piping, equipment, and concrete. At this time, the Department does not have accurate estimates of the volumes for these additional materials that also might need to be placed in the repository. (Calculating the additional fee is complicated by the Department's statutory and contractual obligation to dispose of commercial spent fuel and by the statutory and physical constraints on the capacity of a repository at Yucca Mountain, Nevada. While the statutory 70,000 metric ton limit on waste at Yucca Mountain is already exceeded by the current inventory of waste, Yucca Mountain's physical capacity could well also be exceeded if the volumes of waste the worst-case scenario contemplates are added to current estimates.)

Question. Can you please explain why you don't believe this material in question at each site qualifies as the high-level waste and the processes that will ensure that high-level radioactive waste remains separate?

Answer. The U.S. Department of Energy (DOE), the U.S. Nuclear Regulatory Commission (NRC), and the Atomic Energy Commission (AEC) (the predecessor of both DOE and the NRC) have long been of the view that while most of the radioactive waste from reprocessing is "high-level waste," some of the material is not high-level waste, and is instead "waste incidental to reprocessing." Reprocessing waste is currently stored in tanks at DOE sites in Idaho, Savannah River, and Hanford.

DOE plans to solidify, treat and dispose as high-level waste the portion of tank waste that contains by far the vast bulk of the radioactivity. At Idaho, DOE already has finished calcining these wastes; at Savannah River, DOE currently is vitrifying them through the Defense Waste Processing Facility; and at Hanford, DOE will vitrify them in the new Waste Treatment Plant currently under construction.

But DOE, the NRC, and the AEC have also long been of the view that some of the tank waste can instead be properly classified as "waste incidental to reprocess-

ing” that may be managed and disposed of as low-level waste. These wastes do not pose the same risk to human health and the environment and can safely and lawfully be disposed of as low-level waste because they do not need the degree of isolation that the more highly radioactive wastes require.

To determine which tank waste may be managed in this fashion, DOE has used criteria developed originally through an iterative process of consultation with the NRC regarding particular tanks waste, and subsequently codified in the “Waste Incidental to Reprocessing” portions of Order 435.1, DOE’s Order governing classification of nuclear waste. These criteria specify that to classify waste as low-level WIR, DOE must remove as much radioactivity as possible, and that what remains must be solidified and put in a form that will meet performance objectives for disposal of low-level waste as set out in 10 C.F.R. part 61—primarily, that it will not result in an annual dose to a member of the public of more than 25 millirems and that inadvertent intruders will also be protected.

DOE believes that this approach is protective of public health and safety and consistent with the Nuclear Waste Policy Act’s (NWPA) definition of “high level waste.” The NWPA defines “high-level radioactive waste” as: (A) the *highly radioactive material* resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that *contains fission products in sufficient concentrations*; and (B) other highly radioactive material that the Commission, consistent with existing law, determines by rule *requires permanent isolation*.” [emphasis added] DOE believes that the criteria described above properly distinguish between “highly radioactive” material from reprocessing that “requires permanent isolation” in the spent nuclear fuel repository and “non-highly radioactive” material from reprocessing that does not.

We recognize that some doubt has been cast on the correctness of this view by the Idaho District Court decision in NRDC v. Abraham. The Department has appealed that decision and has also asked Congress to enact legislation to clarify this matter.

DEFINING HIGH-LEVEL WASTE

Question. Part of the debate over WIR involves the rather unclear definition of high-level waste. We now identify waste depending on how it was generated, not on how radioactive it is—that doesn’t make much sense. Do you agree that a serious National Academy of Sciences study to improve the definition of high-level waste might help clarify this issue and avoid the kind of debates you are now having with Waste Incidental to Reprocessing?

Answer. The Department agrees that identifying waste depending on how it was generated rather than on its radioactivity does not make much sense. However, while a serious National Academy of Sciences study to improve the definition of high-level waste might help clarify this issue, such a study would not provide DOE the legal certainty it needs to make the kinds of decisions it must make to clean up the tank farms.

DOE’s accelerated cleanup plans for the tank farms at Idaho, Hanford, and Savannah River all depend, in part, on DOE’s being able to classify certain waste from reprocessing as low-level or transuranic waste. DOE’s problem is that the District Court has ruled that the underpinnings of these cleanup plans are contrary to Federal law, and that if it proceeds with key aspects of the current cleanup plans, the District Court has signaled that it will issue an injunction telling DOE to stop.

Therefore, any new or different criteria DOE might promulgate, even if based on the advice of the National Academy of Sciences, would also likely be the subject of legal challenge. Unless Congress acts quickly to clarify the Department’s authority to proceed, our efforts to clean up the tank farms at these sites, which are at the core of our accelerated cleanup plans there, will be largely paralyzed.

Question. It is unclear from the budget how much material there is at each of the sites and the amounts of material DOE believes should be designated as high level, transuranic and low-level waste at each of the sites.

Answer. DOE currently has roughly 91 million gallons of waste from reprocessing stored in tanks in Idaho, Savannah River, and Hanford. Stabilizing and disposing of this material and closing the tanks is the Department’s single largest ongoing environmental risk-reduction project.

DOE’s plans at all three sites call for removing on the order of 99 percent or more of the radioactivity from the tanks. At all three sites, DOE’s plans then call for solidifying, treating and disposing of the vast bulk of the removed radioactivity from these stored wastes in a deep geologic repository for spent nuclear fuel and high-level waste. At two of the sites (Savannah River and Hanford) DOE’s plans call for solidifying, treating and disposing of some of the removed waste, consisting of lower-

activity salts that in most instances will have been further treated to remove additional actinides and cesium, and which will contain only a small fraction of the radioactivity from the tanks, as low-level waste on-site. Likewise, at two of the sites (Idaho and Hanford), DOE's plans call for solidifying, treating and disposing of some of the removed waste, again containing a small fraction of the tank radioactivity, as transuranic waste at the Waste Isolation Pilot Plant (WIPP). Finally, at all three sites DOE's plans call for grouting in place in the tanks a very small amount of residual waste remaining in the tanks.

Waste Destined for Spent Fuel Repository

Specifically, of the 99 percent or more of the curies removed from the tanks, at Idaho, DOE already has finished calcining the wastes destined for the spent fuel repository, representing on the order of 98 percent of the total tank waste radioactivity. At Savannah River, DOE is currently vitrifying the wastes destined for the spent fuel repository, representing on the order of 99 percent or more of the total tank waste radioactivity, through the Defense Waste Processing Facility. At Hanford, DOE is not as far along in the cleanup process, since it is still building the principal facility it will use to prepare waste for disposal at the spent fuel repository and developing other aspects of its plans. There too, however, DOE anticipates that it will treat and dispose of the vast bulk of the radioactivity in the spent fuel repository using the new Waste Treatment Plant currently under construction.

Waste Anticipated To Be Disposed of On-Site as Low-Level Waste

In addition, of the 99 percent or more of the radioactivity to be removed from the tanks, at Savannah River and Hanford, DOE's plans call for retrieving and processing the lower-activity salt waste from the tanks that in most instances will have been further treated to remove additional actinides and cesium for disposal on-site as low-level waste in saltstone vaults at Savannah River and at a facility permitted under the Resource Conservation and Recovery Act (RCRA) for mixed low-level waste disposal at Hanford. Again, this waste represents a small fraction of the radioactivity from the tanks—on the order of 1 percent or less of the tank waste radioactivity at Savannah River and a small amount of the tank waste radioactivity at Hanford. At both sites, this waste would have to meet the performance objectives for disposal of low-level waste specified in 10 C.F.R. Part 61 under which a member of the general population cannot receive an annual dose of more than 25 millirem from the residues, and an inadvertent intruder must be protected as well. In addition, at both sites, the waste would have to be disposed of in accordance with State environmental law permits because of its chemical constituents, and DOE would have to account for this waste disposal in overall site remediation and closure under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Waste Potentially Disposed of as Transuranic Waste at WIPP

Further, at Idaho and Hanford, of the 99 percent or more of the curies removed from the tanks, DOE's plans call for retrieving and processing some of the tank waste (representing a small fraction of the radioactivity in the tanks) for disposal as transuranic waste at WIPP. This would contain on the order of 1 percent of the tank waste radioactivity at Idaho and less than 1 percent of the tank waste radioactivity at Hanford. This includes the sodium-bearing waste which comprises the remaining liquids in the 8 tanks in Idaho, and the contents of between 8 and 20 tanks of the 177 tanks at Hanford. This waste would have to meet WIPP's waste acceptance criteria in order to be sent there. Its disposal there would have to be shown to be consistent with the assumptions made in WIPP's performance assessment, which demonstrates that the repository and the waste disposed of there complies with the Environmental Protection Agency's standards for disposal of transuranic waste and is protective of humans and the environment. It also would have to comply with any other relevant WIPP limits such as the WIPP Land Withdrawal Act's statutory limit on how much remote-handled transuranic waste may be disposed of at WIPP. In addition, DOE has committed to New Mexico to seek a specific WIPP RCRA permit modification from the State addressing these waste streams before sending them there.

Tank Residues

Finally, at all three sites, DOE's plans call for grouting in place a very small amount of residual waste remaining in the tanks. DOE anticipates that these residues will constitute on the order of 1 percent or less of the overall tank radioactivity. More importantly, under DOE's plans, when this process is complete, the residual waste grouted in place will have to meet standards for disposal of low-level waste specified in 10 C.F.R. Part 61, under which a member of the general popu-

lation cannot receive an annual dose of more than 25 millirem from the residues, and an inadvertent intruder must be protected as well. By comparison, a frequent flyer receives approximately 100 millirem per year from cross-country airline trips, and individuals receive at least 20 millirem from each medical X-ray. The treated and grouted residues will also have to meet State environmental law requirements with respect to their chemical constituents and will have to be accounted for in overall site remediation and closure under CERCLA.

SMALL BUSINESS CONTRACTS AND EM CLEANUP

Question. I realize that OMB is forcing DOE to increase the number of contracts they extend to small business and at the same time DOE is forcing the labs and sites to reduce their small business contracting just so DOE can meet its "quota." I don't think it makes sense for DOE to manage a large number of small business contracts at each site. This is exactly what led to the frustration that created the NNSA out of the DOE. I'm so concerned about this trend that I've scheduled a hearing in the Energy and Natural Resources Committee for this subject. I fear that some of these procurements are placing contracts with small businesses that jeopardize the safe effective performance of critical work. There are two examples of small business set asides related to EM that concern me. The first is the very complex site cleanup for Paducah and the second is the draining of sodium coolant from the FFTF reactor at Hanford, which is also an extremely dangerous job. How can you assure me that EM is not jeopardizing effective completion of critical tasks with this rush to entrust procurements to small businesses?

Answer. As part of its strategy to increase competition and the cadre of business firms with the core competencies to effectively meet the challenges of EM's accelerated cleanup mission, EM elected to issue competitive procurement actions set-aside for small business firms. Prior to making a final decision on competing a small business set-aside contract, EM publishes a Federal Business Opportunities (FedBizOps) sources sought notice inviting firms to demonstrate their capabilities to perform the work, either alone or by teaming with other firms. Responses to these notices are carefully reviewed to ensure that qualified companies are available to perform the work prior to issuance of a final solicitation. This process was followed for both Paducah and the Fast Flux Test Facility contracts.

Firms, large and small, competing to perform EM work scopes are held to the same high-level expectations. These firms must clearly demonstrate a robust safety program, sound technical approaches to safely complete the work, cost-effective work practices, commitment of a strong management team, and demonstrated experience in performing similar work. The same metrics for measuring performance after award are applied regardless of the size of the firm performing the work.

EM is pursuing small business opportunities aggressively; and I am confident that sufficient checks and balances, management commitment, and accountability are built into the acquisition and project management processes to assure that the small business firms selected for these projects will contribute substantially to EM's success in meeting accelerated cleanup schedules.

RISK BASED END STATES

Question. Earlier this year, EM raised serious concerns at Los Alamos and other sites when you asked each site to sign off on a so-called Risk Based End State (RBES), which would serve as the benchmark measuring the end of cleanup at each site. I've heard concerns at some sites that they did not have enough time to involve the public in a decision of such serious impact on the people living and working at these sites. Has EM provided additional time at each site for development of the RBES, and is the public being seriously and significantly involved in development of each of these RBES site criteria?

Answer. Stakeholder involvement is an essential part of the RBES process. The RBES documents will remain drafts for quite a while, possibly even 6 months, until we believe that we have adequately and openly addressed any issues or concerns with the public and with the regulators.

DOE PLAN TO CONVERT DEPLETED URANIUM

Question. What is the status of the depleted uranium plants located at Portsmouth and Paducah?

Answer. Construction on the depleted uranium hexafluoride (called DUF₆) project is on schedule for start by July 31, 2004. DOE is working to issue the Environmental Impact Statement Record of Decision which must be completed prior to the start of construction.

Question. Will these plants be able to accept waste material from outside the State?

Answer. We note that DOE does not consider its DUF₆ to be waste and therefore, views the facilities as conversion facilities, not waste processing facilities. Some cylinders containing DUF₆ are being received in Portsmouth, Ohio, from the East Tennessee Technology Park in Oak Ridge, Tennessee. No other off-site materials are currently planned for conversion at these sites other than possible shipments between the two sites. However, there is nothing in the design of the plants that would preclude their use for other DUF₆.

Question. Is there any additional R&D to be undertaken to demonstrate the viability of these facilities?

Answer. No. The dry conversion technology the facilities will use is a scaled up version of a process already commercially viable and in use at Richland, Washington, and in Germany.

QUESTIONS SUBMITTED BY SENATOR PATTY MURRAY

Question. Ms. Roberson, I understand you have decided to terminate at the end of this fiscal year the partnership DOE has with the General Services Administration to provide child care for Federal and contractor employees at Hanford. I also understand that child care is particularly tight in Richland, especially for infants, and that this move is likely to displace 60+ children. In addition to affecting operations of the existing facility, this decision almost certainly will kill the plans for a new state of the art facility, for which bids had already been received. Is DOE terminating this important employee benefit at all of its facilities or at ANY other site except Hanford?

Answer. Employee benefits vary from site to site so a comparison of one single area does not provide a true measure of the benefits that are afforded our Federal and contractor workforce.

The Department is hopeful that GSA will continue its plans for the new facility and sees no reason why our discontinuation of subsidy payments should be a hindrance toward that goal if GSA's survey is correct and the need for childcare in the Richland area is growing.

If GSA decides to pursue other Federal partnerships in the Richland area, it would have many to choose from, including the Federal Bureau of Investigation, the Postal Service and the Environmental Protection Agency.

Question. Why is providing childcare suddenly no longer a priority?

Answer. EM's priority is environmental restoration. With regard to the childcare facility, earlier this year a DOE assessment revealed a level of participation and interest by Federal employees that was inconsistent with the amount of Federal dollars being spent to subsidize the childcare facility. Based on this assessment, and the shrinking of both the Federal and contractor workforces as cleanup projects reach completion, DOE believes these funds would benefit a much broader range of people if invested in the workforce to accelerate Hanford cleanup.

Question. Have you considered a longer transition period to ensure DOE will continue to be a good corporate neighbor and allow a new, high quality facility to be developed?

Answer. The notification period to GSA is 120 days, taking us through the end of September 2004. This should be sufficient for the private childcare facility operator to seek funding from other entities.

Again we are hopeful that GSA will continue to pursue its idea of a new facility.

Question. Will DOE (or GSA) be liable for costs incurred in the design, bid proposals, etc. for the new childcare facility that will now (likely) not be built?

Answer. GSA is the sole Federal agency responsible for the construction of the new childcare facility. To date, we understand that GSA has spent \$275,000 on architectural design and energy modeling contracts but has not awarded the construction contract for the new childcare facility, so neither costs nor penalties are currently being incurred.

Question. Ms. Roberson, contractors at the Hanford site and the Hanford Atomic Trades Council have for years successfully negotiated pension plan and other cost effective agreements—with the full approval and endorsement of DOE. It is my understanding that the DOE is actively pursuing new contracts for multiple projects, specifically the Fast Flux Test Facility Closure Project, the 222 S Analytical Services Project, and the River Corridor Closure Project. I am very concerned that these Requests for Proposals (RFPs) contain a new two-tiered pension system that only requires 5 years of pension contributions from the winning bidder. Some might see

this move as a back door attempt by the DOE to reduce their costs by reducing requirements for pension contributions.

Hanford employees have remained dedicated to completing the challenging tasks of the mission. This spirit of labor/management cooperation will be seriously jeopardized if workers are now told that the pension benefits they have earned will need to be reduced in order to save DOE money. I would like to know what you intend to do to maintain the level of pension benefits workers have been promised and have earned through years of their hard work at Hanford?

Answer. DOE agrees that the addition of new contractors and multiple pension plans for Hanford employees may have potential impacts on workers. However, the DOE Richland Operations Office will ensure that the new contracts minimize any such issues. The Department anticipates responsive resolution of any issues that may arise.

QUESTIONS SUBMITTED TO THE OFFICE OF ENVIRONMENT, SAFETY AND HEALTH

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

REPORTING OF INJURY AT DOE SITES

Question. I was disappointed to read in the Washington Post that an Inspector General's draft report found that DOE failed to report a significant number of injuries that occurred at DOE sites. The Inspector General found that DOE maintained "inaccurate and incomplete accident and injury data." This article also alluded to the fact that accelerated cleanup contributed to the behavior of not reporting worker injury. Assistant Secretary Cook, since the responsibility for worker safety and environmental protection falls under your watch; I would like a full explanation as to how the IG has come to these conclusions. Are these allegations of under-reporting accurate and if so, where and to what extent has this occurred within the DOE complex?

Answer. We take all issues raised by the IG very seriously, especially those involving safety. The Inspector General has a rigorous process for generating reports and part of that process is asking for a review of the draft report for factual accuracy. Our initial findings indicate that many of the conclusions are based on out-of-date or incorrect information. We identified and began corrective actions on some of the items identified in the report over a year ago. In other cases, the Program Offices have taken other measures to get up-to-date, accurate information directly from the field sites, to resolve the delay time in getting information into the data system. I do not agree that the accident statistics for the Department are under-reported.

Question. What are you doing about the current findings of the Inspector General that DOE is not accurately reporting worker injuries?

Answer. We are providing comments to the Inspector General on the inaccuracy of some aspects of the report as it addresses reporting worker injuries while continuing to implement the changes that have been underway for over a year to correct other issues.

Question. Why are we learning of this activity from the Inspector General and not your office? What are you doing to correct this?

Answer. Actions were already underway by my office to correct the known problems with the reporting system, and by the Program Offices to obtain accurate information in other ways until these actions were completed.

OVERSIGHT REORGANIZATION REFORM

Question. Ms. Cook, your testimony references oversight changes and restructuring of your Office in 2002 and 2003. In 2002, you noted that the independent oversight functions were removed from your office and you now work to promote "safe and environmentally compliant conduct of work." In 2003, your restructuring efforts describe cuts to management and new focus on "e-government initiatives." If you aren't performing oversight in areas of worker safety—what office is?

Answer. The Office of Independent Oversight and Performance Assurance performs independent oversight of safety and security for the Department of Energy.

Question. Did any of the changes since 2002 result in your inability to hold DOE contractors to the highest level of worker safety?

Answer. DOE holds its contractors to the highest level of worker safety. EH writes the policies and requirements and provides technical assistance to the program offices who implement these requirements. The Office of Independent Oversight evaluates DOE and contractor compliance with these requirements. EH continues to

analyze the information provided by the Office of Independent Oversight, especially where contractors may not be in compliance, in order to refine the requirements to achieve the right outcomes; protecting our workforce and the public. The changes in EH over the last several years has allowed us to better focus on setting the right policies to drive the right performance.

DOE SITE PROFILES

Question. Last year, DOE testified that it was in the process of developing site profiles to pull together the necessary site data in order to speed up the case approval process for workers that were made sick while working for the Department. DOE's testimony stated that by developing a complete understanding of the occupational hazards at each of the DOE sites, it will help the doctors in evaluating claims of exposure based on the hazards a worker may have been exposed to and when. The site profiles will significantly improve the doctor's ability to do their job. Where do we stand on the development of site profiles and how much is being spent in fiscal year 2004 and how much have you provided for this effort in fiscal year 2005?

Answer. DOE already provides all available medical, work history, work exposure and facility information to the Physician Panels. We consider the information DOE has been providing to the panels to be adequate to support Physician Panel deliberations. With respect to "site profiles", the term is not clearly defined and the Department believes that creating site profiles as commonly defined by advocates of this process would be a costly and time consuming effort that would not provide substantial assistance to Part D applicants. Further, it is not clear whether there is even adequate data to profile toxic exposures at DOE facilities in any reasonable way. Regulatory requirements for the collection and maintenance of information relevant to ionizing radiation exposures, such as the data used by NIOSH for Part B, predate and far exceed such requirements for occupational exposures to potentially toxic chemicals (Part D) at worksites. Such requirements, referred to as job-exposure matrices, can be exceptionally difficult, labor intensive, and expensive, if they are scientifically feasible at all.

In fiscal year 2004, with the recent \$23.3 million appropriations transfer that Congress approved, DOE will spend roughly \$49 million to collect, compile, categorize and summarize the information required by the Physician Panels process. Of this, roughly \$24 million will be spent on collecting information from the field sites and \$25 million will be spent on data quality control, compiling, categorizing, summarizing and post-panel quality control. In fiscal year 2005, \$14 million is being requested for these functions.

Question. How much will it cost and how long will it take to develop a site profile at each of the 15 largest DOE facilities?

Answer. Currently, DOE is soliciting information on how to scope a project for providing a "site overview." This project would provide for each site a generally standard format and improved categorization of existing information. At this time DOE does not have a specific dollar figure for this project. As discussed above, DOE believes that the limited value to a qualitative assessment on some pre-defined set of agents does not justify the high cost for developing this information and, therefore, DOE has no current plans to conduct or prepare comprehensive "site profiles" for DOE's facilities.

Question. Can you provide for the record a timeline as to when you expect to have site profiles for the sites?

Answer. DOE does not have a timeline for the development of site profiles. As discussed above, DOE believes it would not be prudent to develop and prepare "site profiles" as that term is commonly defined. However, DOE is investigating the development of site overviews that would better package existing data by site.

BUDGET DETAILS

Question. The fiscal year 2005 request fails to provide the same level of detail for the Office of Environment, Safety and Health as provided in the fiscal year 2004 request, especially in the area of the Energy Supply—Health Account. In addition to providing fewer details of your spending priorities there is also significantly less money. The budget provides \$45 million. This is \$22 million less than was provided in fiscal year 2004. I would appreciate a written description of your program budgets within each of the following accounts—Health, Employee Compensation, and Corporate Safety.

Answer. The budget is broken down in detail commensurate with the total budget amounts. However, the budget request was based on certain assumptions.

Under Health

Occupational Health (\$15,902,000).—This includes former worker medical screening, former beryllium worker surveillance, medical monitoring of former workers from Rocky Flats, integrated DOE occupational medicine support, and a portion of the funding for the Radiation Emergency Accident Center/Training Site (REAC/TS).

Public Health (\$13,500,000).—This includes funding to other agencies, including the National Institute for Occupational Safety and Health (NIOSH), the National Center for Environmental Health (NCEH) and the Agency for Toxic Substances and Disease Registry (ATSDR) for independent energy-related studies relevant to DOE workers and neighboring communities.

Epidemiologic Studies (\$3,300,000).—This includes a collection of both medical and exposure information to expand understanding of the health effects of radiation, chemical and other hazards to current DOE workers and the public.

International Programs (\$12,520,000).—This supports the upgrading and validation of our knowledge of radiation health effects among workers and populations exposed to ionizing radiation in the former Soviet Union and Spain, participation in the life span study of the Hiroshima and Nagasaki exposed population and environmental monitoring to support resettlement activities as well as special medical care for a specific group of radiation-exposed individuals in the Marshall Islands.

Total.—\$45,222,000.

Under Employee Compensation

For EEOICPA, the fiscal year 2005 budget request is \$43 million for the operations of the EEOICPA Part D program, which includes the following activities and funding allocations. Resource centers jointly managed with the Department of Labor are funded at \$2.4 million. These centers provide outreach to potential EEOICPA applicants and support during the application process. Collecting and producing medical, work history, work exposure and facility information data from the DOE field sites are provided \$14 million. Processing the Part D cases up to the Physician Panels, paying for the Physician Panels and providing for quality controls are funded at \$24.6 million. Additional Federal staff to manage the 200 percent increase in case processing and the 900 percent increase in Physician Panel determinations that will be required to eliminate the backlog of Part D applications at DOE in 2006 is provided \$2 million.

Corporate Safety.—\$10,883,000

Performance Assessment/Information Management (\$2,000,000).—This provides for the analysis and certification of DOE's performance by synthesizing operational information, and also provides web-based information technology support for effectively distributing safety and health information.

Quality Assurance (\$6,483,000).—This provides quality assurance policies and requirements to support current DOE missions, and performs evaluations and accreditations to ensure that the health and environmental data that is generated by DOE is technically defensible. This includes the operation of the Radiological and Environmental Science Laboratory, a Federal reference laboratory that performs much of the Department's evaluation and accreditation services.

Facility Safety (\$1,600,000).—This supports appraisals of accidents, facility authorizations bases and safety allegations, and special safety reviews on specific topics such as seismic analysis, fire protections, facility design and the startup/restart of facilities.

Enforcement (\$800,000).—This activity covers the statutory mandate of the Price-Anderson Amendments Act of 1988 to enforce compliance with Code of Federal Regulations nuclear safety requirements at DOE sites and the enforcement of the Worker Occupational Safety and Health Rule.

Question. Where do you propose to make the \$22 million in spending cuts from the fiscal year 2004 appropriation to meet this year's request?

Answer. The DOE EH health budget includes a variety of activities. There are several items in the health budget that require less funding in fiscal year 2004 comparable appropriation is \$22 million more than the fiscal year 2005 request. The comparison to prior year funding is:

FUNDING SUMMARY

[In thousands of dollars]

	Amount
Program/Activity Health Fiscal Year 2003 Comparable Appropriation	50,051
Program/Activity Health Fiscal Year 2004 Requests	66,660

FUNDING SUMMARY—Continued

[In thousands of dollars]

	Amount
Program/Activity Health Fiscal Year 2004 Comparable Appropriation	67,335
Program/Activity Health Fiscal Year 2005 Requests	45,222

Of the total decrease of \$22 million, several items account for a decrease in the request of \$16 million from fiscal year 2004 to fiscal year 2005 includes:

- Decrease \$12 million for international health studies. DOE's role in certain studies is reduced as they are coming to closure. The Department also plans to use carryover balances to meet some fiscal year 2005 requirements. DOE is evaluating its responsibilities and future involvement in these studies.
- Decrease of approximately \$3 million for public health studies around DOE sites because studies have concluded. These studies are conducted by Health and Human Services (HHS) agencies. This is transitioning to smaller, more highly focused studies, and it is expected that HHS will complete the DOE studies in fiscal year 2007.
- Decrease of approximately \$1 million for DOE occupational health programs, due to efficiencies to be realized by combining the 12 individual worker screening programs into a comprehensive nationwide program. The nationwide programs will provide the most efficient and effective method to guarantee that all former DOE workers are offered the opportunity to participate and will be served consistently across the complex.

Question. Please provide a summary of the Marshall Islands Program budget for fiscal year 2003, fiscal year 2004, and proposed for fiscal year 2005, which presents the Program's budget components, describes the activities to be changed, and the reasons for such changes.

Answer. The following breakdown of the Marshall Islands Program is provided for fiscal year 2003, fiscal year 2004 and fiscal year 2005.

[In thousands of dollars]

Program Activity	Fiscal Year 2003	Fiscal Year 2004 Allocated	Fiscal Year 2005
Medical	2,340	2,100	2,100
Environmental	3,950	2,200	1,900
TOTAL	6,290	4,300	4,000

There are no activities to be changed in the level of services provided as part of medical surveillance and treatment of radiation-related conditions in fiscal year 2005. The medical program provider has managed the program for 6 years, therefore the program is under review and options for its future design and management are being considered. Upon review of options with Federal partners, the options will be presented to the Government of the Republic of the Marshall Islands, and the governments of the two affected atolls for discussion.

For the environmental program, the changes in fiscal year 2004 were directed at clearing up the analysis backlog of the environmental samples gathered from the Marshall Islands and the preparation a final analytical summary report to support future program planning purposes. To date \$4.3 million has been allocated as detailed in the above chart. Other than reductions associated with Congressionally directed prior-year offsets and rescissions, the only difference between appropriated and allocated-year-to-date is \$1.5 million. That amount is being held in reserve to address additional activities which will be developed in conjunction with the Marshallese during the annual June-July meeting sponsored by DOE.

The field missions for fiscal year 2004 were suspended to allow the scientists to focus on this backlog. The suspension did not delay any work required to assist in resettlement of Rongelap Island. In fiscal year 2005, the environmental program will support resettlement activities on Rongelap Island and the network of whole body counting facilities. The funds requested are adequate for these two activities.

DOE AND HHS STUDIES

Question. DOE and HHS have signed cooperative MOUs over the past 15 years that require DOE to provide funding to the National Institute for Occupational Safety and Health (NIOSH) for epidemiological studies on former DOE workers. I under-

stand that the existing MOU will expire at the end of this year. Will you sign another agreement to provide for independent health studies of former DOE workers?

Answer. It is the intention of DOE to develop, in cooperation with HHS organizations, a new MOU for the conduct of independent health studies. A draft revised MOU has been prepared; following internal review it will be sent to HHS for comment.

MARSHALL ISLANDS HEALTH TESTING

Question. The traditional mission of the Marshall Islands Program has been to monitor health and the environment in the four affected communities. In the 1990's, the Program entered into MOAs with the four Atolls to support remediation and resettlement activities, but DOE's level of commitment to these new activities is unclear. Does DOE regard its support for remediation and resettlement activities as dependent on its traditional monitoring activities?

Answer. DOE is committed to and will continue to meet its responsibilities to provide medical surveillance and treatment for radiation-related conditions among the exposed population on Rongelap and Utrik Atolls and to support resettlement activities. DOE will be negotiating annual work plans with each of the four atolls to assure continued environmental monitoring support for resettlement.

Question. Are these activities undertaken on an "as funds available" basis, or would DOE request funds if necessary to support the remediation and resettlement activities set forth in the various MOAs?

Answer. DOE annually requests funding that will assure continuity in medical surveillance and treatment of radiation-related conditions and support for resettlement activities. Environmental monitoring activities in the MOU's have in the past been supported on an "as funds are available" basis. It is DOE's intention to request and dedicate resources to meet its legislative responsibilities.

Question. What is the status of DOE's MOAs with the four affected communities? Does DOE plan to extend the MOAs upon on their expiration?

Answer. The Bikini MOU expired several years ago and has been replaced with an annual work plan; the Rongelap MOU extension expires this June; the Enewetak MOU expires in 2005, and the Utrik MOU in 2007. It is DOE's intention to explore with representatives of the four Atolls transitioning from MOUs to annual work plans that would focus activities on providing environmental monitoring support to resettlement.

Question. Do you plan to have a physical DOE presence in the Marshall Islands, if so, where and what will their responsibilities entail?

Answer. DOE is evaluating the need for a physical presence, beyond the logistical support office on Kwajalein Island, in order to provide environmental monitoring support to resettlement.

MARSHALL ISLANDS CARRYOVER FUNDS

Question. It is my understanding that \$1.5 million in fiscal year 2004 funds has not been expended at this time. Is that correct? What work is not being performed in the Marshall Islands as a result of the withholding of this \$1.5 million?

Answer. It is correct that \$1.5 million in fiscal year 2004 funds appropriated for the Marshall Islands are not currently planned to be expended in fiscal year 2004. This funding was identified for conducting an environmental mission to the Marshall Islands.

Question. Given that there are 6 remaining months in this fiscal year, why hasn't this funding been obligated?

Answer. It is felt that it is most important at this time to dedicate contractor resources to the development and publication of scientific and technical reports and articles on the latest radiological status. These reports and articles, providing the latest results of analysis of samples from previous environmental missions, will be critical to informing all parties in the conduct of deliberations concerning the Republic of the Marshall Islands Changed Circumstances Petition. The Department conducts annual meeting with the Marshallese and jointly prioritizes additional activities. These funds may be used for those specific activities or other follow-on activities jointly determined to be needed.

Question. Could the remaining \$1.5 million be used pursuant to DOE's MOAs with the four affected atolls? If yes, why hasn't DOE pursued this option?

Answer. It is important that contactor efforts be dedicated to the development and publication of scientific and technical reports and articles analyzing the results of prior environmental missions at this time. It is DOE's intention to support activities in the MOU's consistent with these legislative responsibilities. The remaining \$1.5

million will be dedicated to the Marshall Islands program in the conduct of future activities in support of the medical care and resettlement activities.

Question. Can this \$1.5 million be reprogrammed to other activities within DOE or must it be expended within the Marshall Islands Program?

Answer. It is DOE's intention to support its legislative responsibilities in the Marshall Islands. The \$1.5 million could be reprogrammed in fiscal year 2004, with Congressional approval, but DOE has no intention of doing so at this time.

EXISTING SAMPLES—MARSHALL ISLANDS

Question. What is the status of the previous samples that have been taken by Livermore scientists at the Marshall Islands?

Answer. The DOE contractor is in the process of completing analysis and writing scientific and technical reports and articles to provide the latest data and information on radiological conditions on the four Atolls in the Marshall Islands.

Question. Is it correct that, at this time, the samples have been analyzed and the Department is in the process of preparing a summary report? If yes, when will that report be available?

Answer. Yes, the DOE contractor is in the process of preparing scientific and technical reports and articles on radiological conditions in the Marshall Islands. The contractors draft report is to be submitted to DOE for review. DOE has seen an early draft of the Whole Body Counting results, is awaiting a draft report on plutonium uptake data results, and expects a draft report on "where we stand" on the radiological characterization of the four Atolls in the near future. The contractor has not determined its delivery dates for the deliverables to DOE.

MARSHALL ISLANDS ANNUAL MEETING

Question. Will Program officials hold their next annual meeting with representatives of the four Atolls in June 2004? If not, when will that annual meeting take place?

Answer. DOE Program officials do plan to hold the annual meeting with representatives of the four Atolls in June 2004 timeframe.

QUESTIONS SUBMITTED BY SENATOR PATTY MURRAY

Question. Ms. Cook, why ramp down the Hanford Former Worker Program (Hanford FWP) if there are over 2,700 workers with significant past exposures and who have requested examinations waiting to be screened at that site?

Answer. We are not ramping down the program. We are transitioning to a nationwide medical screening program that will serve all former workers from all DOE sites locally. The Hanford Former Production Worker Medical Screening Project was initiated in 1996 as a 5-year pilot project. Any former worker interested in medical screening who is not seen this year by the Hanford Former Production Worker Medical Screening Project will be seen by the nationwide program, which is scheduled to be in place in October 2004.

Question. Ms. Cook, how will USDOE ensure that workers who are currently awaiting exams in the FWPs do not risk being dropped from the program in the transition to a national program (subject of new RFA)?

Answer. DOE has provided the principal investigator of each site-specific project with a toll-free number that can be given to individuals interested in screening but for whom the ongoing medical screening projects cannot see this year. Additionally, through the existing site-specific projects, DOE will soon mail an information package regarding the transition to a nationwide program. Included in this package is an authorization for individuals to sign requesting that their names and mailing addresses be provided to DOE. DOE will then send them additional information upon initiation of the new nationwide program.

Question. Ms. Cook, has performance of medical screening grantees known as the former worker program been satisfactory?

Answer. For the most part, yes. However, there are several lessons learned from this effort. These include the following:

- DOE's central management of these projects is complicated by the multiple management teams within each of the numerous cooperative agreements, each with layers of their own management and subcontractor management;
- Multiple layers of management per project resulting in increased overhead charges and fees;
- Communication between DOE and participating organizations, as well as participating organizations and former workers, is cumbersome;

- Recruitment of participants has been a major cost for many of the projects, with additional years of funding for some projects resulting in minimal increases in worker participation;
- Coordination efforts between the FWP and the Former Beryllium Worker Medical Surveillance Program at DOE sites have been challenging;
- The significant resource needs for each of the site-specific efforts conducted to date has resulted in a delay in the initiation of screening for former workers at remaining defense nuclear sites.

Question. Ms. Cook, how will the new national program coordinate State workers compensation and EEOICP claims (sub-part D), e.g. will the examination sites around the country be expected to file Washington State worker's compensation claims and sub-part D claims as workers currently get?

Answer. The current programs were not expected to file state workers compensation claims on behalf of workers. The workers who participate in the new program will be directed to the Federal and State resource centers as appropriate, where they will get the assistance they need to file.

Question. Ms. Cook, why are the Former Worker Programs (FWPs) being asked to destroy workers' data? What are the risks to privacy when such data are protected by Institutional Review Boards responsible for protecting human research subjects?

Answer. The Former Worker Programs are being asked to handle records appropriately based on the workers' desires. The worker gets to decide what happens to their records. Of course, a worker may have their own records. Then the worker can decide if they would like the DOE to keep copies. The worker may also decide that they would like the former program to have copies of their records and use them for other purposes, but that is a decision to be made by each worker. Additionally, the clinics that conduct the medical screening under the FWPs are required by State law to maintain the workers' medical records for a certain number of years. Workers have the option of obtaining copies from these clinics in the future as well.

Question. Ms. Cook, how will the Office of Worker Advocacy (OWA) obtain records from FWPs who are being told to destroy such records?

Answer. The Office of Worker Advocacy can only obtain records from the worker, or with the worker's permission. The DOE does not have open access to workers' records.

Question. Ms. Cook, has NIOSH reviewed the new RFA, as required by Section 3162 of the 1993 Defense Authorization Act?

Answer. Section 3162 of the 1993 Defense Authorization Act does not require NIOSH to review the RFA. We have also referred back to the original MOU signed by Energy Secretary Hazel O'Leary and HHS Secretary Donna Shalala in August 1995, and this MOU does not call for HHS (NIOSH) review of DOE-issued RFAs either.

Question. Ms. Cook, are lessons learned and experience from the FWPs during the 8 years of operation being utilized in the RFA?

Answer. Yes, they are. The current program is expensive and cumbersome to operate when divided into 12 separate cooperative agreements. There are workers at many sites that are still waiting for an opportunity to have screening exams. We understand we must provide this screening more efficiently and effectively and we believe the nationwide medical screening program will accomplish this objective.

- DOE's central management of these projects is complicated by the multiple management teams within each of the numerous cooperative agreements, each with layers of their own management and subcontractor management;
- Multiple layers of management per project resulting in increased overhead charges and fees;
- Communication between DOE and participating organizations, as well as participating organizations and former workers, is cumbersome;
- Recruitment of participants has been a major cost for many of the projects, with additional years of funding for some projects resulting in minimal increases in worker participation;
- Coordination efforts between the FWP and the Former Beryllium Worker Medical Surveillance Program at DOE sites have been challenging;
- The significant resource needs for each of the site-specific efforts conducted to date has resulted in a delay in the initiation of screening for former workers.

QUESTIONS SUBMITTED TO THE OFFICE OF CIVILIAN RADIOACTIVE WASTE
MANAGEMENT

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

BUDGET REQUEST

Question. The President's budget requests \$880 million for Yucca Mountain. A significant portion of this funding is to be paid for by fees assessed to utility customers. The fund will collect \$749 million this year. The budget proposes that the annual receipts be reclassified as discretionary funds and then appropriated. As the former Budget Committee Chairman, I know you can't waive a magic wand to reclassify these fees. It requires legislation and some degree of cooperation. I am not optimistic this can be accomplished this year. However, if we fail to get agreement to reclassify the fees, the Senate Budget Resolution assumes a minimum level of funding of \$577 million. If Congress is only able to provide \$577 million, what activities will the Department be forced to defer in fiscal year 2005?

Answer. National and Nevada transportation activities would again be deferred, with no reasonable chance for schedule recovery. Site infrastructure maintenance work would be delayed, and effort devoted to repository design and development would be reduced.

Question. Will this significantly delay the opening of Yucca Mountain beyond the 2010 target date and can you estimate what impact this would have on litigation costs for the department?

Answer. We are at the point where any reduction in our funding profile, in fiscal year 2005 or the out-years, will adversely affect the scheduled 2010 opening date for the repository. If funding for fiscal year 2005 is frozen at the fiscal year 2004 level of \$577 million, the Department's ability to meet the scheduled 2010 repository opening date will be severely compromised and most likely lost. To date, more than 65 claims have been filed by utilities in the Court of Federal Claims for breach of contract to recover monetary damages incurred as a result of the Department's delay. For each year of delay beyond 2010 that the Department is unable to begin accepting spent nuclear fuel from commercial reactors pursuant to the Department's contracts with utilities, the Department estimates that the utilities will incur costs of \$500 million a year to store their spent fuel at utility sites, some portion of which the Department would be liable for. A delay in opening the repository could substantially increase the government's liability.

YUCCA MOUNTAIN—METAL STORAGE CONTAINERS

Question. I have read that Nuclear Regulatory Commission (NRC) Chairman Nils Diaz disputes the controversial evaluation made by the Nuclear Waste Technical Review Board regarding the corrosion analysis of the metal containers that will be used at Yucca Mountain. Dr. Chu could you please explain where you believe the science comes out on this issue and share with the committee how site managers have dealt with this issue?

Answer. The EPA's radiation protection standards and NRC's licensing regulations require DOE to evaluate long-term repository safety based on risk to the public. This requires an assessment of the total system, and must take into account the likelihood of events occurring and their effect on public health and safety.

The NWTRB's report focuses on a specific component of the repository system, namely the disposal canisters, and does not address the effect on the safety of the total system. In addition, the NWTRB position relies on the presence of very specific conditions in the repository tunnels, which DOE technical studies show are very unlikely and will have no significant effect on public health and safety.

DOE's current design will meet the EPA and NRC regulations, and we will demonstrate this in our license application to the NRC. DOE will continue to discuss the corrosion issues with the NWTRB at their regularly scheduled public meetings. Finally, if required by the NRC, the issues will be fully and openly explored during the licensing proceedings.

Question. Do you believe that the U.S. population would be safer to locate spent fuel in Yucca Mountain as opposed to leaving the waste where it currently is scattered across the country?

Answer. As Secretary Abraham indicated in his Yucca Mountain Site Recommendation statement, spent nuclear fuel and high-level radioactive waste is currently stored in surface facilities at nearly 130 locations in 39 States awaiting final disposition. Most of these temporary storage facilities are located near major population centers, and because nuclear reactors need abundant water, are located near rivers, lakes and seacoasts. More than 161 million Americans live within 75 miles

of these temporary storage facilities. It is clearly preferable to locate these wastes at Yucca Mountain, on Federal land, more than 90 miles from any major population center, where they would be placed 1,000 feet underground.

YUCCA TRANSPORTATION

Question. It is my understanding that the Department has not made a final decision as to whether it will use rail or truck transportation to move the waste to Yucca, or decided on a specific route. When will the Department make its final decision and begin the Environmental Impact Study?

Answer. On April 2, 2004, I signed the Record of Decision selecting mostly rail as the transportation mode, and the Caliente corridor as the rail corridor in Nevada. To initiate the Environmental Impact Statement development process for a specific rail alignment within the corridor, DOE conducted five public scoping meetings in Nevada from May 3 through May 17, 2004. The public comment period is scheduled to end June 1, 2004. We expect to issue the Draft EIS early next year and issue the Final EIS later in the same year.

SUBCOMMITTEE RECESS

Senator DOMENICI. That's what it is. So we stand in recess until the call of the Chair.

[Whereupon, at 11:45 a.m., Wednesday, March 31, the subcommittee was recessed, to reconvene subject to the call of the Chair.]